An astrological discourse with mathematical demonstrations proving the powerful and harmonical influence of the planets and fixed stars upon elementary bodies in justification of the validity of astrology : together with an astrological judgment upon the great conjunction of Saturn & Jupiter, 1603

Heydon, Christopher, Sir, d. 1623., Fiske, Nicholas.

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AN *Astrological Discourse* With Mathematical DEMONSTRATIONS, Proving the Powerful and Harmonical Influence of the Planets and fixed Stars upon Elementary Bodies, in Justilfication of the Validity of ASTROLOGY

Together with an Astrological Judgment UPON The great Conjunction of Saturn & Jupiter 1603.

Written by that worthy learned GenItleman Sir CHRISTOPHER HEYDON, Knight, and now published by NICHOLAS FISKE, *Jatromathematicus*.

LONDON, Printed by J: Macock for Nathaniel Brooks at the Angel in Cornhil. 1650.

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THis exquisite Treatise having been near 40 years detained in private hands, is now by the good hand of God made publike; it being the One, and only Copy of this Subject extant in the World: Pen'd it was by the incomparably learned Sir *Christopher Heydon* Knight, whose able Pen hath so strenuously vindicated Judicial Astrologie; as to this day not any Antagonist •••...st encounter with his unanswer able Arguments. In this Tractate that very thing which all Antagonists cry out for, viz. *Where's the demonstration of the Art?* is hear in this Book by •••••...able Mathematical Demonstrations so judiciously proved, that the most scrupulous may receive full satisfaction. I shall ouly add thus much, that we may herein adlmire the divine Providence of God, who so long since elevated the Conceptions of this learned Kt, to go on with, to perform and perfect so high and so sublime a piece of learning, and yet deferred its. publication, until both the times, and mens minds also were by his all-guiding hand made capable of its reception: The Work speaks its own merits. I am thine, WILLIAM LILLY.

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To the Reader.

RICHARD FORSTER, Doctor in Physick, one of the Colledg of Physicians in London, in Astronomy very learned, and in Astrology no less skilful, as many yet living do very well remember; for although he was Physician to *Robert Dudley*, that great Earl of Leicester, yet did he survive him, and dyed long after King *Iames* came into England: by this Doctors means Sir *Christopher Heydon* Kt.

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of the County of Norfolk, became not onely a Lover but an admirable Student in Astrology; and to say truth, I do not find in all my readling that any of the Ancients did exceed him in Knowledg herein.

Some years after K. *Iames* his coming into England this learned Knight, to mainifest his gratefulness unto Doctor *Forster*, from whom he acknowledged his initialtion in this Study, did preisent unto him in London in a well written hand, this inlgenuous and deep piece of Philosophy which I now

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make publike. Doctor *For\ster*, as my self well know, received it as an inestimable Jewel, and preserved it in his Study amongst the rarest and choicest Pieces therein; but death depriving this learned Doctor of life in that year he was President of the Collledg, by great providence this ensuing Treatise came into my hands; which I have carefully preserved with great respect, both to the Aulthor and matter it self.

I have many times endealvored its impression, but without success; for until of late years such was the error

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or rather malice of the Clerlgy, who only had priviledg of licensing Books of this nature, that they wilfully relfused the publication: But of late casually shewing this Manuscript to my worthy friend *Elias Ashmole* Esq he earnestly desired it might be made publike, freely offering to be at the charges of cutting the Diagrams in brass, that so the work might appear in its greater lustre.

I might here fall into a selrious and just Commendation of every particular Chapter of this Work, and the weight almost of every

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word in each Chapter; but sith the Work it self is short, I will not anticipate thy readling, but refer thee to the book it self, having abundantly satisfied my self in these my aged days to have added somewhat to the railsing up of Astrology, which during all my years, and they are more then 70. hath been strangely kept under, and aspersed by men malilcious and unlearned; so that although I had my self mainy times serious thoughts of expressing my own Astrololgical Conceptions in publike, yet was I ever either delhorted

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by Friends, or retardled by a servile fear of incurling the then present Powers. However, if God shall enlarge my days, I hope herelafter to be serviceable to the learned Society of Astrololgers, unto whom I heartily commend this at present, and in the future such other Pieces as he shall enable me to perform, while I live, and am called, Thine,

Nicholas Fisk. Philiatros, & Astrophilus.

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Courteous Reader, These Books following are printed for NAITHANIEL BROOKS, and are to be sold at his shop at the Angel in Cornhill.

- 1. PLanometria, or the whole Art of Survey of Land, shewing the use of all Instruments, but especially the plain Table; whereunto is adlded an Appendix to measure regular Solides, as Timber, Stone, & the like, and to find the contents of Timber tree as it groweth, useful for all that inltends either to sell or purchase, by *Ol. Wallingby*. 8.
- 2. An Arithmatick, discovering the secrets of that Art in Numbers and Species, in two Books: 1. Teaching by precept and example the operation in *Numbers*, whole and broken by *Decimals*, a new practise & use of the Logarithms, *Napyers bones*, with new Propositions, touching the Quantities, qualities and Rules of Medicines. 2. The great Rule of *Algebra* in Species, resolving all Arithmatical Questions by supposition, with a Canon of the powers

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of Numbers, fitted to the meanest capacity, by Joinas Moor, late of Durham. 8.

• *3. Tactometria*, or the Geometry of Regulars, after a new, most exact, and expedious manner, in Solids, not only in respect of magnitude or demension, but

also of gravity or ponderosity, aclcording to any metal assigned, with useful Experilments, falling in by the way of measure & weight. And withall, the like artifical *Practical Geometry* of Regular-like Solids, and of a Cylindrir body, for liquid or Vessel Measure, with sundry new Experiments never before extant for gauging, a work very useful for all that are imployed in the Art Metrical, by *John Wiberd*, Doctor in Physick.

• 4. Records Arithmetick, or the grounds of Art, teaching the Practises of Numbers and Fractions after an easie manner.

Histories with curious Discourse of Humane Learning.

- 1. The English Gentleman, and English Gentlewoman, both couched into one volume, with the Ladies Love-Lecture, and a Supylement, called the Turtles Triumph, by *Richard Braithwait*, Esq *Folio*.
- 2. The History of the Golden Ass. 4.
- 3. The Painting of the Ancients, the beginning,

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progress and Consummation of that Noble Art; and how those ancient *Artificers* attained to their still so much admired Excellency.

- 5. Israels Redemption, or the Prophetical Hilstory of our Saviours Kingdom on Earth, that is, the Church Catholique and Triumphant, with a Discourse of Gog and Magog, or the Battle of the the great Day of God Almighty, by *Robert Malton* of *Exon-Colledg* in *Oxon.* 8.
- 6. An Introduction to the Teutonick Philosolphy, being a determination of the original of the Soul, at a Dispute held in the publike School at *Cambridg* at the Comencement, *March 3. 1646.* by *Charls Hotham*, Fellow of *Peter-House. 12*.
- 7. *Oedipus*, or A Resolver, being a *Clew* that leads to the chief Secrets and true Resolution of *Ammorus* Natural, Moral and Political Problems, by *G. M. 12*.
- 8. The Celestial Lamp, enlightening every dilstressed Soul from the depth of everlasting DarkIness to the height of eternal Light, by *Tho: FetItisplace. 12*.

Choyce Poems, with several excellent Tradegies and Comedies.

• 1. Fons Lachrymarum, or a Fountain of Tears, from whence doth flow Englands Complaint, Je/remiahs

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Lamentations, with an Elegy upon that Son of Valor Sir *Charls Lucas*, by *John Quarls*. 8.

- 2. Nocturnal Locubrations, or Meditations Divine and Moral, with Epigrams and Epitaphs, by *Robert Chamberlin*.
- 3. The Unfortunate Mother, a Tragedy, by *Thomas Nabbs*.
- 4. The Rebellion of Comedy, by Tho: Raulins.
- 5. The Tragedy of Messalina, by Nathaniel Rilchards. 8.

Excellent Peeces of Divinity of certain Ortholdox Divines, with other Sermons, viz.

- 1. The Remedy of Discontentment, or a Trealtise of Contentation in whatsoever condition, fit for these sad and troubled Times, by the right Relverend Father in God *Joseph Hall*, late Bishop of *Exon* and *Norwich*. 12.
- 2. The Grand Sacriledg of the Church of Rome, in taking away the sacred Cup

from the Laiety at the Lords Table, by the late Reverend *Daniel Featly*, Doctor in Divinity. 4.

- 3. The Cause and Cure of Ignorance, Error, Enmity, Athiesm and Prophaness, or a most hopeful way to Grace and Salvation, by *R. Young*. 8.
- 4. A Bridle for the Times, tending to still the Murmuring, to settle the Wavering, to stay the

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Wandering, to strengthen the Fainting, by *John Brinsley* Minister of Gods Word at *Yarmouth*.

- 5. Comforts against the Fear of Death, being short Meditations of that precious Gentlewoman Mrs *Anne Skelton* of *Norwich*, wherein are sevelral Evidences of the Works of Grace in her own Soul, which were the stay of her Heart against the Fear of Death, by *John Collings* of *Norwich*.
- 6. Iacobs Seed, or the Excellency of seeking God by Prayer, by *Jeremiah Burroughs*, Minister of the Gospel to the two greatest Congregations about *London, Stepney* and *Criple-gate. 12*.
- 10. The Zealous Magistrate, A Sermon by *Thomas Trescot*.
- 11. Britania Rediviva, or a Soveraign Remedy to cure a sick Commonwealth, in a Sermon preachled in the Minster at *York* before the Iudges at the Assize, *Aug.* 9. 1649. by John Shaw Min. of Hull.
- 9. The Princes Royal, or a Sermon preached in the Minster in *York* before the Iudges, *March 24. 1650*. by *John Shaw* Minister of *Hull*.
- 10. Anatomy of Mortality, divided into eight Heads. 1. The Certainty of Death.
 2. Meditaltions of Death. 3. Preparations for Death. 4. The right Behavior in Death. 5. The Comfort in our own death. 6. The Comfort against the death of friends. 7. The Cases wherein its lawful and unlawful. 8. The glorious Estate of Gods children after death. By George Stronde.

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CHAP. I.

Of Winter.

NOt without great Judg/ment doth *Pliny* affirm * those that first under/stood the obliquity of the *Zodiack, Rerum fores aperuisse:* For besides that, the finding out hereof prepared the way first to find out the periodical moti/ons of the Planets. The Philosopher himself teacheth us, that the variety, generation and corruption of all things dependeth chiefly hereupon. And common experi/ence driveth us to confess the access and recess of the *Sun* unto the four Cardinal Points of this Circle to be the most gene/ral

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and assured cause of the years succesive alteration. Upon this ground I affirm the *Winter* quarter to take his true beiginning at what time the Sun making his

entrance into the Tropick of \bigcup , hath atltain'd his greatest declination Southward from our Zenith or Vertical Point. From whence divers Impediments evident in Nature do follow, which bereave our Septentrional parts of that heat and vigor wherewith at other times the Sun being nearer, and more elevated, doth preserve and cherish the Elements, and all things composed of them, whether vegetable or sensative.

CHAP. II.

The first Reason of the difference be tween the Heat and Light in Summer and Winter, drawn from the diversity of Stay above the Horizon.

* FOr whereas first of all continuance of action doth necessarily add force of operation to all natural Agents, it cometh to pass in Winter by reason of the Suns

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remote Position, that his continuance albove the *Horizon* is shortest, and his ablsence under the same longest, thereby now causing the shortest days, and longlest nights. For example, the Elevation of the Pole at the honorable City of *London* is observed to be 51. g: 32[] and the greatest declination of the Sun in this our Age is 23. g: 31[] 30[] Therfore in the Winlter *Solstice* the Sun finisheth his Diurnal Ark, to them of this City in 7 hours 34 minutes, and for this consideration can heat the Air here but a little while, seeing the same is not one third of a natural day, at which time nevertheless he relmaineth hidden under the Earth more then twice so long, and so ceaseth from calefaction, imparting no benefit of his light and heat to us at all: Whereas in Summer the Sun persisteth 16 whole hours, and 26 minutes in operation, not ceasing above seven hours and a half from action, by reason of his absence under the *Horizon*. Wherefore look what proportion 7 hours 34 minutes have to 16 hou: 26 min: the like difference there shall be betwixt the Suns operation in Summer and Winter, in respect of his diverse stay

above the *Horizon*, which (not to be too scrupulous) is a double proportion the one to the other.

CHAP. III.

The second Reason of the foresaid Difference, drawn from the difference of Union in the Beams.

SEcondly, In the work of the *Stars* Union of Beams is a thing regarded, ^{*} as of special consequence. But it is clear to them that have any insight in the *Op/ticks*, that in Winter the Union of the Beam, incident with the Beam reflected, is not comparable with that which the greater Altitude of the Sun causeth in Summer; and therefore the effects delpending upon this Union, must accordly be increased or diminished in proportion. That this is true,

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[illustration] Diagram.

Suppose A B in the first Figure, and C D in the second, to be two equal parts of the Earths *Superficies;* whereupon the Beams of the Sun E A in Winter, and G C in Summer do fall: E A in the Winter Solstice, making an Angle with the plain of the Horizon H A B, of 14. gr: 56[] 30[] *viz*. E A H, or E B H, beling the Meridian Altitude of the Sun at *London* upon that day. Likewise let G C K, or G D K, be admitted to irradiate the Earth at the highest Meridian Altilude

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in the Summer Solstice at an Angle of 61 gr. 59[] 30[] Then forasmuch as (by the principles of the *Opticks*) the Angles of incidence and reflection are evermore equal, A F in the first Figure, and C M in the second, being the reflected Beams, E F and G M shall be reverberated from A B and C D at like Angles with their proper incidents. Which being true, it is also evident, that because the inward Angles at C and D are greater then the inward Angles at A and B, the Triangle C L D shall of necessity be greater then the Triangle A I B. And forasmuch as the Union of the Beams, incident with the reflected, hapneth within the limits of these Triangles, therefore of consequence the Union C L D in Summer is so much greater then the Union of A I B in Winlter, as the *area* of the one doth exceed the *area* of the other, which is about, or rather somewhat above, six to one; and being joyned to the former difference, as is usual in addition of proportions, provleth, that this difference of Union, togelther with the Suns stay in Summer, caulseth the heat to exceed that which we relceive in Winter above twelve times.

The third Reason of the former Diverlsity, proceeding from the differing quantity of Beams.

A Third Reason of the difference and ^{*} diminution of heat in Winter proceedeth from the small quantity of Beams which then illustrate the Earths *Superficies*, in comparison of that which the Sun sendeth down to us in Summer. For as the specifical qualities of the rest of the Stars accompany their light, so it is also true, that the heat of the Sun is conlveyed unto us by his Beams. Wherefore the fewer the Beams be which fall upon the *Horizon*, the less also shall be the heat. And forasmuch as in Winter the Sun darteth them more oblique then in Summer; therefore it is evident, that there shall not so many Beams fall upon the plain of the *Horizon* at the oblique Position of the Sun in Winter, as when he approacheth nigher to a perpendicularity in Summer. To demonstrate this,

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[illustration] Diagram.

Suppose Q O, and Q P, to be two dilvers *Superficies* of the Earth, upon which the same Beams A Q do shine diversly; that is, *perpendicularly* upon the *Super/ficies* Q O, but *obliquely* upon the *Super/ficies* Q P. Then I say, that the Triangle Q O P, whose Angle at O is by supposition a right angle, the side Q P, which subtendeth the said Angle must be greatler then the side Q O, by the 18 of the first

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of *Euclide*. And yet from hence we see it followeth, that all the light which is shed upon Q P, the oblique, but greater *Super*/•...*cies*, shall fall notwithstanding upon Q O, the less, but directly subject to the Beams A Q. If moreover we take a •pace Q V in the greater *Superficies*, which by construction shall be equal to Q O, and from N to V draw down a patrallel to the line A O P, it is evident that the Beam N Q; wherewith the *Superficies* Q V is illuminated, is but a part of the Beams A Q. For which Reason the *Superficies* Q V shall participate but part also of that heat which is communicated to the *Superficies* Q O, being dilrectly subject to the Beam Q A, which also was manifest enough even by the precedent Figures, where the Winter Beams E A, compared with the Summer Beams G D, are next hand in proportion but as one to four, by reason whereof the Sun hardly imparteth ¹/₄ of that light and heat to us at his Meridional height in the Winter Solstice, which we feel from his highest Position in the Summer. This Diminution, considered with the former Impediments, leaveth us not above the

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forty eight part of that heat in Winter, which we receive in Summer from the Sun.

CHAP. V.

The fourth difference caused by the depth or diverse crassitude of the Air by which the Beams pass.

NEither can we be rightly said to ^{*} have the full fruition of this portilon of Heat in Winter, by reason that the crassitude or thickness of the Air is then more object to the Suns oblique Beams then in Summer, and doth thereby resist and hinder them more now then in Summer. For proof hereof,

[illustration] Diagram.

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let D F H represent the *superficies* of the Earth: I G N, the convex *superficies* of the cloudy or vaporous Region: And suppose the Sun to shine upon F, the place of our habitation, from three several points, Z, A, B. Z being the vertical point over our heads, A the Suns Summer height, B his altitude in Winter (as before was expressed:) So Z F, A F, and B F, shall be the Suns Beams, part whereof, *viz*. G F, K F, and M F, we see are in a sort obscured, hindered, and resisted by the vaporous Air. But now for as much as (by the 7 of the 3 of *Eucli/de*) G F is shorter then K F, & K F then M F, therfore the Sun shal of necessity feel less impediment in the Zenith at Z, then at A, and by consequence at A, then at B. because still the further the Sun is reimoved from the *Zenith*, the longer is the passage of the Suns debilitated force, through this impedilment; we are first to agree how deep or thick this cloudy Region of the air that •efringeth the Sun-beams may be: which our late *Artists*, to whom greatest creldit

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is to be given, as they have been more conversant and curious in the observation hereof, then their Predecessors, do all agree not to extend three English miles in the Perpendicular G F, as is plain unito * them that are acquainted with the Disputations of *Tycho, Rothman, Kepler,* and others. For we must here distinguish between the matter of the *crepusculum,* and this vaporous air, which is so little elevated above the Earth, that hardly we may live upon the tops of some hills (as *Aristotle* testified of *Olympus*) without applying a Sponge to the nostrils for want of this thick air which we use in respiration: The like doth *Josephus A/costa* witness unto us of the *Seres* in *Peru,* which are hardly passable by such as labor to overcome their height; belcause the air, before they came to the tops of these hills, groweth so subtil and attenuated. And to add something of my own experience, my self having made some tryals of the height of the Clouds, as well in the heat of Summer, as at other times, could never yet finde them more lifted up above the superlificies of the Earth, then 236. perches.

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Wherefore admitting G F, which is the part of the Perpendicular line that penetrateth

the gross Air to be three miles, and F C, the *semidiamiter* of the Earth, to be 3436 miles, and the Summer and Winter heights as belfore; it will be manifest by suppultation, that whereas K F shall pierce but four miles, or thereabouts, M F shall pass twelve, and somewhat more. So that the opposition and impeldiment which the Sun-beams do suffer in Winter, is triple to that which they feel in their Summer passage, and doth therelfore weaken the Suns force in that prelparation. And being added to the rest of the causes before specified, doth delmonstratively prove (all together consildered) that the heat in Summer excelleth that which we receive in Winter in prolportion, as 144. is to 1. In explaining whereof I have been the more curious, because that which is here demonstrated concerning the Suns apparition, is likelwise to be applyed to the rest of the Planets, which moving under the same Circle that the Sun doth, shall receive the like addition or abatement of force, and

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therefore of singular moment to be observed in all Judgments.

CHAP. VI.

Why the ending of July and beginning of August is the hottest time of Sum/mer, and so likewise the ending of January and beginning of February the coldest time of Winter.

BUt we must further consider, that although these four causes are most evident upon the very *Solstitial* days, yet it is not always of necessity that upon them we always feel the greatest heat or cold. But there is yet another general cause to be added, which in respect of it self doth commonly aggravate the bitterIness of Winter about the beginning of *February*. The Reason whereof *Kep/ler* doth resolutely ascribe to *Privation*^{*} onely, with *Cardan*, further denying Cold to be a positive quality, and with him *Picus*, that any specifical vertue doth descend unto us from Heaven, belsides Light and Heat; and therefore saith

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that the Air, Water, and Earth, being naturally destitute of Heat, as they are material and thick Bodies, are neither •uddenly warmed, nor suddenly cold, but conceiving Heat in *June* when the •un is at the highest, do accumulate it •nto the Heat of *July* and *August* after •he same manner, and for the same Real•on, that the heat of the day in the afterl•oon is greater then at high noon, until •he Sun, after his declining by degrees •rom us, doth also by little & little withldraw his heat from these Elements, which •hen return to their former Nature, and •o necessarily admit Cold in the absence •f Heat, which still prevaileth more and more by the Suns long discontinuance •rom us, until after *February* be past, •e begin to recover some part of his •orce again.

The method set down which is observed in refelling Kepler.

WHereunto, because it concerneth the very Foundation of *Astrollogie*, I must crave leave to answer, not doubting but if I can demonstrate that both Cold and all the rest of the first qualities do proceed essentially from Heaven, and are onely to be found by accident in the Elements, that this will give the Reader, who belfore stood in doubt, good satisfactilon. And the better to clear this point, I will first shew, that Heat is neilther essential to the Light, nor so insepalrably united unto it, but that they are and may be severed as diverse in Nature; whereby it will likewise follow, that the rest of the qualities may concur with Light as well as Heat. This done, I will secondly make it plain that Cold is no privation, but a positive quality, and that neither it nor the rest of the qualities can originally be referred to the Elelments,

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but of consequence to Heaven, yea, and that without any incongruity in *Philosophy*, whatsoever the *PeripateIticks* and their followers have heretofore thought. Which thus premised, the Realder shall be the better prepared to bellieve both that this common Intension in *February* is to be ascribed (as *Astrologie* teacheth) partly to those parts of Heaven, which the Sun doth then pass by, partly to such Constellations as do then rise and set; and also the better to conceive how the Intensions & Remissions of every season may grow by the particular passions of the *Planets* and the rest of the *Stars*, and not from naked *Privation*, as *Kepller* would have it.

CHAP. VIII.

Other qualities concomitate Light, as well as Heat.

ANd now to prosecute these things in order: First, I affirm, That allthough we see Heat and Light to descend joyntly with the Beams of the Sun, yet

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it doth not concomitate the light of all the Stars; for that heat is neilther the substance of the light, (for assertion whereof *Scaliger* justly reprehendeth **Cardane*,) nor more to be conlfounded with light then sight, then sight is to be confounded with touch, wherelof Light and Heat are proper Objects. For as we cannot feel the Light, nor see the Heat; so those Senses which are not always joyntly exercised together (as we see, and not feel, and feel, and not see) do teach us, that Light and Heat are dilvers qualities, and both in reason and nalture may be conceived to subsist the one without the other. This will best aplpear by the diffinition of both, which evermore expresseth the nature of the thing in question. Forasmuch therefore as *Heat is that quality which doth con/gregate***homogeneal things, and separate those that are heterogeneal*, which agreeleth not to the property of the Light, which is brought unto us by the Beams of the Stars, the same being defined (aclcording to *Alhazen* and *Vitellio*) to be * only *The Species or Image of the inhe/rent Light of the Sun or*

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whence it is sent: There is nothing more evident then that that Heat which is conlveyed unto us with the beams of the Sun, is of a divers nature from the light thereof. For both Sence and Experience do prove, That Heat is no Image or simillitude, but a real and active quality, which how it should subsist in an Image as in the subject, or how Light should subsist in Heat, being likewise an accidental quality, are difficulties which in my judgIment will not easily be answered, except we can prove, that one accident may be the subject of another, which is against all *Philosophy*. This then alone, although it doth sufficiently prove, that Light and Heat are two divers qualities; yet to make it more apparent, dayly observation doth shew, That one may be and remain in the absence of the other, as we see in Attrition, where Heat is excited without Light, and so we may exclude the Light, when nevertheless the heat of the Sun shall remain. And though the Earth, and the rest of the Elements, retein the im|pression of the former day, yet doth nei!ther the Earth, Air, or Water, shine after the Sun is set: Wherefore if Heat may

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thus exist, and be separated from the light; and it be also true (as before hath been shewed) that the one cannot subisist in the other, what may be more clear then that for these Reasons Light and Heat are two diverse qualities, and that Light can neither be the essence of Heat, nor Heat of Light? Truly therefore doth *Durandus* distinguish of their properties, teaching us, that the property of Light is only to illuminate, and that it is not of the essence thereof either to heat or inlfrigidate; *Sed* (saith he) *duntaxat me/rito corporis in quo inest, ut si virtute calidum sit, &c.* So then the heat, which accompanieth the light of the Sun, is not to be said any property of light, but in truth to be referred to the Suns occult and specifick Virtue: as with like realson I do affirm, and hereafter will prove, That the rest of the first qualities, together with the special properties of every Star, doth accompany Light as well as Heat. For it is clear, that there be many * lightsom bodies which do not heat, but are rather actually cold, as for example, the *Diamond, Carbuncle,* and other previous Stones, besides the Eyes, Heads,

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and Scales of Fishes, and the Sea it self, which in tempestuous weather doth relpresent huge mountains of light. Yet to affirm that the Sea burns, would be relputed by the common Proverb, no better then a plain lye. So false is it, that light is always the cause of heat, and proceedleth only from such bodies as are of a hot nature; which I could yet further amlplifie by experience that I have made in Reflections, it being certain that *Spherilcal* Concaves, or *Parabolical* Sections, will as sensibly reflect the actual cold of Snow or Ice, as it will the heat of the Sun. Wherefore if Cold may accompany the reflected Light, why

not the origilnal * Light it self? Neither do I desire herein my bare word to go for payment, but do further remit him that shall call this in doubt unto his own practise, and the Testimonies of *Maginus*, who, in the Representations of his Glass sent to the *Emperor*, doth confirm the same in these words: *Species esse sensu tactus perceptibilis, ut apparet ex lumine can/delae, item ex nive & glacie infrigidante per suam imaginem remotè admodum*. And my self have often made the like

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tryal of the full Moon, which neverthelless ^{*} is reflected without any heat at all that sense can perceive, notwithstanding that the same Glass doth sensibly reverlberate heat with the light of a small canldle, and reflecteth the beams of the Sun with that force, that it inflameth all combustible matter in an instant, and causeth Lead to run. Whereunto then may it be imputed, that the Moon shining with her borrowed light, doth not sensibly warm, as well when it is projected from the Sun? Will they answer that the Suns light is debilited by reflection from the Moon? But if they maintain heat always to accompany light, then this is no anlswer. And though I should yield that it may weaken the heat also, and cause calefaction in a lesser degree, yet this doth not satisfie how so glorious a Light as the full Moon doth yield, especially in Winter, should be deprived of all heat, when the same is collected, re-united, and multiplied again, in which case as well all Beams are as well strengthened by reflection, as weakened without his help. Add hereunto, that the greatest Frosts happen in the fairest Moon-shine

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nights, which proveth Cold to accompany her light. VVherefore I rather affirm this to be another notable Argument, proving Light of an indifferent nalture, neither hot nor cold of it self, but to participate of the quality of the star, or other body from whence it is reflectled, seeing the same light which from the Sun causeth heat, hath no such quality reflected from the Moon, but rather the contrary, and divers from it, the force thereof chiefly shewing it self in cold and moisture. But if *Keplers* opinion were true, that Cold were nothing but a meer *Privation*, this could not be: and therefore leaving that which hath been allready alledged to the Judgment of the learned, I hold it very material, according to the order formerly propounded, to prove next, That Cold is a positive quality.

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CHAP. IX.

Cold a positive quality, as well as Heat.

ANd first I demand of *Kepler*, or any that maintaineth his Opinion, if Cold be ascribed to nothing but privation of Heat by the Suns long absence, how it

cometh to pass, that one VVinter doth far exceed another in extremity of Cold? Will he answer that the Sun is more remote, or longer absent from us, one year then another? It were too rildiculous, knowing that the Sun hath his limits prescribed, which he never did transgress, neither can, without violating the Law of Nature. The uniform course of the Sun therefore can be no cause of this variety of one year from another: Neither (if it be well considered) ^{*} can Privation be any cause of Cold at all. For seeing Privation is no nature in Beling, but only an imaginary *noncens*, how can that which is not have any action as/cribed unto it? Such a cold therefore could not refrigerate, and so in truth can

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be no cold at all. But on the contrary, we see that Cold is such a quality, as actually constringeth Hail, Snow, Frost, and other congealed Meteors; it conldenseth the flowing *Superficies* of the Water into a firm glassie Substance; it chilleth the Blood, and benumeth the Sense with the extremity thereof: And to be short, through the real existence of this quality in any Subject, we see it giveth the same denomination of Cold, and that the Sense is able to judg it so: But it were absurd to say we could feel that which is not, and against all Reason and *Philosophy* to ascribe these effects unto such a thing as resteth only in imagination but hath no Being in Nature. Where fore this Error in this Point is as palpable as the Cold it self. And to add some what more unto that which I have alrealdy said, I see not how this can be admitled, except we will further reduce *Phaleetons* world again. For if there be no positive nature to moderate and resist the multiplyed heat of the stars; it can not be but in continuance of time all the whole frame of the world must be set on fire. For so long as the stars

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shine, they still affirm succeeding heat to descend with their light, whereupon it doth necessarily follow, that if there be no positive nature to refrigerate, all must needs be inflamed. They must therefore first remove the Sun and Stars out of Heaven, before they can establish their vain Cold by absence and privation of Heat. Which were it granted unto them, see further how, whilst they avoyd *Scylla*, they fall into *Charybdis*. For as on the one side Privation, being a meer Negative, hath no action, and therefore (as hath been proved) cannot model rate the heat conceived in Summer: So on the other side, suppose Cold once induced into the world by privation of Heat, and it will be as impossible to relstore Heat again by the return of the Sun, or any other natural means, as to give life to a dead man. For *a privaltione ad habitum nullus est regressus*. As for their *simile* or example, it will do them small service: For seeing that betwixt twelve and two in the after noon the Sun continueth his action still without interruption, their own realson will teach them, that this is not *ad idem*. For we speak of the intendled qualities of the Seasons, where, by intercourse of the nights, they must needs confess an intermission of the Suns appearation, which alone (as we read) serveth greatly to qualifie the Suns order to them that dwell under the Aequinoctial. Wherefore to conclude this Point also: forasmuch as Cold is the opposite quality to Heat, which of it self is by *Kepler* and *Cardane* confessed to have a real existence in Nature: They must also be driven to acknowledge Cold to be more then a meer Negation and Privation, belcause it is impossible that that which is not habituall can be actually contrary to a particular Nature in Beling.

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CHAP. X.

The first Qualities originally from Heaven, not from the Elements.

HAving therefore (as I take it) sufficiently proved Cold to be a posiltive quality, the next thing which in order offereth it self to be decided, is, whereunto we shall originally refer the same with the rest of the first qualities. And forasmuch as the whole *Systeme* of the world is distinguished into two parts, *Celestial* or *Elementary*, we must of necessity primarily derive them from the one or the other. But I will prove, That they are only by accident, and not essentially, in the Elements; wherefore of consequence originally to be ascribed to the heavenly Bodies. I know they are commonly placed in the definition of the Elements, and therefore they define Air to be hot and moist, Walter cold and moist, Earth cold and dry. But if it be better considered, we may more truly say with *Roslinus*, That the

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Elements rather essentially differ one ^{*} from another in other qualities, which are as it were the off-spring of these, as in rariety, density, levity, gravity, lilquidness, softness, transparancy, opacilty: For so is the Earth, an heavy, thick, dark, firm and stable Element. The Walter likewise soft, flowing, and navigable. The Air light, rare, liquid, and permelable; and so tempered one to another in proportion, that as the Air, in the rarilty and liquidness thereof, is to the softlness and flowing nature of the Water, so is the like constitution of the Water unto the density and firmness of the Earth; neither thin nor thick in extrelmity, but of a middle temperature beltween both. And in a word, they are all proportioned to the heavenly Bodies, but as the matter of things meerly pasisive, * not having their first qualities essenitially in themselves, but by accident from Heaven. Thus teacheth *Aristotle* himself, and thus says his Expositors, *Zabarella, Toletus, Scaliger*, and olthers. Neither do I rest upon their aulthority alone, but upon their firm and evident Reasons. For were these the

essential forms of the Elements, they ^{*} could not be intended and remitted, belcause it is against the principle which denyeth form to admit intension and relmission. But these qualities are someltimes more or less in the Elements; wherefore neither can they be affirmed their essential forms, neither can the Ellements themselves be said the first subljects of Heat, Cold, Moisture, and Sicleity, considering that both Experience and Sence teacheth us, that they be neither hot nor cold, but indifferently disposed to the receiving of all the qualities, and not more capable of the one then the other. For example, to them in a right *sphere* the Air is always hot, by reason of the *perpendicularity* of the Sun beams. To us it is variable, someltimes hot, sometimes cold, sometimes moist, and sometimes dry. And to them nearer the *North Pole* for the most part cold. Nay, which is more absurd, were these qualities formally in the Elements, we should of necessity be driven to conlistitute two forms in every Element anlswerable to the two first qualities aslcribed to every one of them, and those

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not differing *secundum magis & minus*, but in the highest degree of perfection, and that in such sort also as they might not be reputed of the same special kind, but to vary one from another. For if the moisture of the Air should not differ from the moisture of the Water, confusion would follow, and so no dilstinction at all of the Elements. And yet if these qualities be admitted of a divers species instead of four, we must constitute eight first qualities. Wherelfore I take it very clear, that seeing the ^{*} first four qualities cannot originally be derived from the Elements, necessity will infer by consequence, that their first inherence is in the inward forms of the heavenly Bodies, from whence by accildent (as *Aristotle* teacheth) and not otherwise, they are conveyed into the Elements.

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CHAP. XI.

The scruple of alteration in Heaven, (which made the Peripateticks, Picus, Cardane, &c. to ascribe the first Qualities to the Elements,) taken away.

WHich being true, it will not be labour lost, after these *grounds* thus laid, to borrow a little more patilence for examination of the Reason why *Picus*, *Cardane*, *Kepler*, with others, frankly confessing heat to descend with the light of the Stars, are nevertheless so nice to subscribe to the derivation of the rest of the qualities from Heaven: The consideration whereof will also somelthing explain unto us the differing maner between their inherence in the Stars, and in the Elements. And surely I find none other Reason of their doubt in this Point, but that they fear if contrary qualities should originally be found in Heaven, we must withall induce action and pasision between the heavenly Bodies, and so by consequence, generation and coriruption, whereof the *Peripateticks* may not abide to hear. Which Objection may diversly be answered. For first, whatsoever the *Peripateticks* have held, we know the world to have had a beiginning, and therefore even by their own doctrine it shall have an end. And the ^{*} experience of latter times hath sufficiently proved Heaven subject to alteration: as is evident by that Spot which, in the time of *Charls* the Great, continued 8. or 9. days in the Sun, being by *Historio/graphers* (though ignorantly) reputed to be *Mercury*. For *Copernicus* after sup|putation ^{*} findeth it not to be *Mercury*, but a prodigious Meteor, which could not happen but in the *Sphaere* of the Sun, considering it accompanied the Sun it self so long time together. The like, *Buntingus, Gemma Frisius*, and others, report of that strange and bloody obsculrity, which *Anno* 1547. did so darken the Sun three whole days together, as the stars for the most part were seen at high noon. But what need I run to forraign Testimonies? when all *London* can bear me witness of the like Blot, which in the year 1604. 11. and 12. of *Octob*. appearled

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first a little above the South-East Pelriphery of the Sun, and seemed to move by little and little unto the center of his Globe. And whereunto shall we refer the illumination and extinguishing of the Comets and new Stars, which in this our age have been observed to flame in Healven it self? Do they not all demonstraltively prove *generation* and *corruption* in Heaven? True it is, that by reason of our remote distance from the heavenly **Spheres*, we cannot by sense attain to every particular alteration which hapneth there. And therefore *Aristotle* neither being acquainted with the Worlds Crealtion, nor in former ages finding any alteration in Heaven, but still receiving by tradition, that the Planets, the fixed Stars, their motions, and the *medium* in which they are, remained the same, while in the mean time the Earth and Elements are dayly subject unto divers changes familliar to our eyes, concludeth from Experilence, Heaven to be priviledged from allmutation, but the Elements to be oblnoxious thereunto. But could either *A/ristotle* be informed, that now this latte• age (more diligent then the former) hat•

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observed new bodies in Heaven, or were it possible that our mortal eyes might from the Heavens behold the Earth, as now from the Earth we behold them: I verily am perswaded, that both the *Philosopher* would change his opinion, and that we should from Heaven behold as little alteration in the Globe of the Earth, as now we observe in Heaven. He that listeth to read more of this matter, let him peruse *Kepler* himself, *cap*. 23. *de Nova Stella*, where he doth purlposely treat of this Subject, and proveth by five particular Reasons, That the matter of Heaven is alterable. Which if it be true, then is their Argument from the consequence of alteration of no force algainst the first qualities in Heaven, but rather to be retorted upon themselves in this manner. That because there is a *generation* and *alteration* demonstratively observed, *ergo* the first qualities may likewise be affirmed there as fit Inlstruments of these Mutations. But nelvertheless leaving this Doctrine in suspence, because it is new: Yet is not our Cause so needy, but that I dare oltherwise undertake to prove the Conlsequent

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of the Reason to be false, for that ^{*} the Stars may very well be justified to have divers and contrary virtues, with/out admitting any passion in the heaven/ly Bodies. For *Astra agere quod in selipsis non est*, is no rare Maxim among the learned, some of whom use this distiniction between the differing manner of these qualities in the Stars otherwise then in the Elements, by supposing them in the first only *effective*, and in the latter *subjective*: Because (as they will have it) the Stars are not actually hot or cold, but *virtualiter*; that is, they have a certain power to produce Heat and Cold, and the rest of the qualities in the other bodies out of themselves, which nevertheless are not in themselves. But for mine own part, I freely confess not well to conceive this subtilty (though it be *Scaligers*) how the Sun not being habitually hot, yet nevertheless can burn. Rather to go more directly to the work, ^{*} I hold the efficacy of the Stars to proleed from that natural virtue which is

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originally inherent in themselves, which notwithstanding shall never the more subject these excellent Bodies to alteraltion. For as the *Load-stone* (more prelcious then any *Diamond*) hath in many points a singular affinity with Heaven, so it doth not fail to lend us a most lively example, how contraries may be found in the same natural body without delstruction thereof. For what can be more contrary then attraction & repulsion Yet if the Needle be touched with the North Pole of the Load-stone, it is certain, that as that part will attract the same, so the contrary Pole or End will make it fly away, yet without any danger or passion in the stone it self. Why should we not therefore believe, that as Heaven is far more excellent then these sublunary Boldies, so it should be endowed with all the virtues which are found here beneath in a far more excellent manner, and withlout any prejudice to the purity of the matter whereof it consisteth. For if the *Matter* be not proportioned unto the power of the *Agent*, no effect can follow. But even by the Doctrine of the *Peripalteticks* such is the matter of Heaven,

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consisting of a simple and fift essence free from all passion, *ergo* although we do admit contrary qualities to flow from the Stars, yet shall this work no alteratilon, because the matter of Heaven is not an apt subject for this purpose. And for this Reason we may not consider these qualities, as they are found in the Elements, or mixt Bodies, whose matter is passive, but rather as they are inherent in a simple and pure essence, priviledged from corruption, being for this cause called by *Aristotle*, *agentes*, in non-Latin alphabet is thereby to distinguish them from those inferior things which are mutually subject to action and passion, because they consist of elementary matter. I doubt not therefore but by this which hath been said it doth sufficiently appear, That in

this Controversie between the Stars and the Elements, these celestial and pure Lights have obtained priority, as first indued by God with natural power by their motion, Light and secret influence to excite and stir up Heat, Cold, Moisture and Siccity in these sublunary Bodies subordinate unto them, according to their several virtues.

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CHAP. XII.

The Cause why the Cold in Winter is greatest in February proved to proleeed from the different Points of Heaven, whose diversity is shewed.

WHerefore now to return from whence I digressed: Having thus prepared the way, I may the more boldly proceed, and with better assulrance, according to the Rules of *Astrollogie*, ascribe this increase of Cold, which commonly hapneth about *February*, partly unto the complexion of that Sign which the Sun then passeth, partly to the apparent rising and setting of those Conlstellations which ordinarily agree to this moneth. And first concerning that part of Heaven which the Sun then holdeth, we are to know that it is the Dominion of *Saturn*, whose influence excelleth in exciting Cold, (as in that which follows I hope infallibly to demonstrate,) the same being *diametrically* opposite unto the Royal Pallace of the Sun, which allone, to those that repose in the principles

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delivered by *Astrologers*, is sufficient Reason in this case. But if any there be that doth doubt thereof, and whether the matter of Heaven may admit variety as well as the Stars, I doubt not but to satisfie him also, partly by Reason, partly by undoubted Exper•ence.

For first, whereas we see the forms of dilvers ^{*} things in this sublunary world appalrantly to consent both with certain Stars, and with the particular Regions of Healven, Reason teacheth us, that this can proceed from no other probable cause in Nature, then from the sympathy or agreelable temperature of their Substances. And that one or two examples may stand for many, we see the North part of Heaven particularly to affect Iron, that hath either layn long North and South in some old building, or that otherwise hath bin forg'd at such a position, as precisely respected the same. But above all, who is so ignorant of the like impression in the *Load-stone*, as that he knoweth not the Mariner thereby to shape his Course, and to be further able (by the ingenious diligence of our Countryman Mr D *Gilbert*) to give the elevation of the Pole wheresolever

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he be come? Considering therefore that this distinction of Regions is not to be ascribed to any Star, but to the whole *Systeme* or Body of Heaven, therefore

here we see directly a respective quality impressed in these Subsjects, which cannot be ascribed to any thing but the matter of Heaven.

Again, whereas even *Picus* himself, * and the Enemies of *Astrologie*, do grant thus much to *Aristotle*, That if Heaven were quiet, and stood still, nothing could have motion; which granted, it also followeth, according to the proportion of the first motions which are proper to Heaven, That all the natural motions of inferior things are both excited and orldinated: *Valesius* demandeth whether Heaven simply performeth the same by the motion thereof, or by accident. By *simply* he meaneth, as if Heaven did com/municate this motion only because it is moved. By *accident*, as if by moving is communicateth an accidental faculty of motion unto other things: as when the hand moveth the candle to flax; the hand by his own motion moveth the candle, and so burneth the flax or straw; the

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one by it self, because it doth not other wise move the candle, then by the motilon of the hand: but it doth the other by *accident*, because by moving of the hand and the candle, it also conveyeth the flame, which burneth of it self. If therelfore Heaven, by the motion thereof, doth immit any motive faculty unto things, by help whereof they are moved, then hath it of necessity another virtue of moving besides the own Motion. But if *Picus*, to avoyd this, deny Heaven to impart any such virtue, and persist in this opinion, that Heaven moveth because it is moved: Then saith *Valesius*, it shall not skill of what matter Heaven consisteth; seeing this effect would as well follow, if Healven were of wood, mettal, or stone, and were withall carryed about. But this could not be: For if a wooden Sphere were turned about circularly over our heads, why should a stone and smoak (for example) move, in a streight line, the one upward, the other downward? For whatsoever moveth another, it doth it either by *impulsion, attraction, volutaltion*, or *vection*. But a stone falling, is neither drawn, thrust forward, carryed,

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or turned about by Heaven; seeing the same falleth in a streight line: Wherefore *Valesius* strongly concludeth, That the matter of Heaven concurreth with those things that are moved by immitting some virtue which moveth every thing in the kind, which yet is diverse from the circular motion it self.

Besides, if that be true which *Aristoltle*,^{*} and with him hitherto Schools of *Philosophy*, do teach in the definition of a *Star*, That there is no difference beltween the same, and the Orb wherein it is fixed, but that the Star is *Densior pars ejusdem;* Then I say, it doth unanswerlably follow, That as the *Stars* differ one from another in Motion, Magnitude, Colour, and Virtue; so likewise those parts of Heaven wherein they are fixed must needs admit the like variety of nalture and qualities. If any following the late opinion of *Tycho*, and others, shall here deny the Stars to be fixed, and in herent in the matter of Heaven, and aflfirm the substance thereof to be liquid, giving way as the Stars move through the same: I answer, That besides it will be incomprehensible in a mans

uniderstanding,

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how all Stars should finish the diurnal motion from East to West, and yet in the same moment strive with a contrary Endeavor in that which we call the proper motions from the West to the East; and that which is more, at once both ascend and descend from or neerer to the Earth. They shall hardly in the end be able to make this their conceit stand with the motion of []in non-Latin alphabet [] which (as it is evident to Sense) is the very substance and matter of the Heaven it self, differing only from the rest of Hearven in whiteness of colour. And yet we see both the same Stars now contained within the latitude thereof, and others to describe and limit the tract of this Circle, as it crosseth the *Zodiack* from one *Tropick* to the other, which *Ptolomy* did comprehend, & define the same by, in his * time; which to my poor understanding doth infallibly prove, That the fixed Stars at the least are inherent and fastened in the matter of Heaven, for that otherwise the Substance of this Circle could not now be found equally moved from the Aequinoctial Points with the Stars that were then in and about the same. I might

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yet confirm this further by that *Sympalthy* which is found betwixt the Points of Heaven in the time of Conception and Nativities, and betwixt the figure of the Fathers Nativity and the Sons: but for brevity sake I remit him that will be better informed to *Kepller*.^{*}

And now to confirm these Reasons by Experience; I know not what better course to take, then to appeal to their Testimony who have travelled into *Almerica*, in whose stories we read, That the same parts of Heaven, both to them and us, retain the same qualities. For thus *Johannes Lerius*, in the History of * his Navigation into *Brasile*, affirmeth, That their Ship passed the Aequinoctial the day before the *Nones* of *February*, which was about the fourth of that moneth, at what time nevertheless the Sun being in *Aquarius* he complaineth of great Tempests, extream and corrupt rain, with inconstant and tempestuous storms of winde. And no less (if not more) notable is that which I find in *Josephus Acosta*, whose words, for the Readers better satisfaction, as they lie

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in the English Translation, I will set * down, as followeth.

Truly (saith A/costa) it is an admirable thing, and wor/thy of observation, That the Air is most clear, and without rain under the burn/ing Zone, when as the Sun is furthest off: and contrariwise, there is most Rain, Snow, and Mists, when as the Sun is nearest. Such as have not travelled in this new World, will haply think this in/credible: and it will seem strange unto such as have been there, if they have not

well observed it. But the one and the other will willingly yield, in noting the certain experience of that which hath been said of this part of Peru, which looks to the Southern or Antartick Pole: the Sun is then furthest off when it is near/est unto Europe; that is, May, June, July, and August, when he makes his Course in the Tropick of Cancer. Du/ring which moneths the Air at Peru is very calm and clear, neither doth there fall any Snow or Rain; all their Rivers fall much, and some are dryed up quite. But as the year increaseth, and the Sun approacheth near the Tropick of Caprilcorn, then begins it to Rain and to Snow,

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and their Rivers swell from October to December. Then after that, the Sun retyring from Capricorn, when as his Beams reflect directly upon the heads of them at Peru, then is the violence of their Waters great, then is the time of Rain, Snow, and great over-flowings of their Rivers, when as their heat is greatest; that is, from January to mid March: this is so true and certain, as no man may contradict it.

Hitherto *Acosta*. By which it appeareth, that the Sun in the same Signs causeth like effects to them beyond the Aequinoctial, that at the same time he produceth here to us, the fairest or foulest weather hapning to both at the same instant: which may satisfie the most obstinate in this point, seeing throughout the whole world the same parts of Heaven keep still the same quallity. Thus much therefore shall suffice concerning the general constitutions of the Seasons, as the same chiefly depend upon the Sun, and the parts of Heaven which he passeth.

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CHAP. XIII.

Of the particular Intensions or Remissilons which happen by Position of the Planets.

BUt as for the Intension hapning by the fixed Stars, it shall hereafter be handled by it self, as I come to the same in order, forasmuch as the greatest dispolsition of weather may and doth admit Intension and Remission in the particular parts thereof for divers other causes; we must likewise have respect unto them: Amongst which the first that offereth it self unto our Consideration, is the place or Position of the *Planets*, who moving ^{*} under the *Zodiack*, shall for the same Reasons receive the same increase and abatement of force in their Operations, which before I have proved the Sun to receive. For considering the power of *Saturn* consisteth chiefly in cold and conlgealed Meteors, it followeth for an inlfallible *Maxim*, That we are then pinchled with the sharpest and longest Winters, when *Saturn* having surmounted the Aelquinoctial,

shineth in the *Septentrional* Signs nearest our heads; by means whereof, as the Suns force beginneth to grow weak, during his scituation in those Signs, his cold influence shall prevail still more & more, as well because of his slow motion, and long continuance in one place, as also by reason of the more dilrect projection of his Beams, and great described Ark above the *Horizon*. In all which respects his impression must then be more forcible, and the rather, that he then consisteth above the Perigaelon of his Orbs, and so becometh the nearest the Earth that he can approach, which still addeth much to his efficacy. And that experience doth confirm thus much, I refer the *Reader* to *Pontanus*, and *Valentinus Nabod*, in his Comentalry upon *Alcabitius*, and also to

Reisue/*rus*^{*} his Opticks, where illustrating this Proposition, That *All light the nearer it is, the more strongly it doth illuminate the Object,* he hath these words.

Hac ratione (saith he) Anno 1441. sub Im/peratore Friderico Proavo Imp: Caroli V. paulo aute cladem Varnensem Sa/turnus^{*} currens per postremos partes

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Geminorum, Soli oppositas, factusque terrae quam propinquissimus, tam rati/one eccentrici quam epicycli, luminis sui propinquitate in usitatum illud fri/gus effecit, quod adeo saevum fuit diu/turum, ut in Historium Commentarias referri meruerit.

Here therefore they that will be satisfied, may behold Delmonstration as well as Experience, for which cause I hold it needless to commemorate any further examples hereof, especially seeing it is not so long since the year 1591, at what time being likewise * placed in II, as well as the years immedilately before and after, the effects of his cold influence were so lasting and hurtful, specially to sheep that perished in the deep of Snows, as I know they cannot be yet forgotten. Notwithstanding it shall not be immaterial to add this out of *Functilus* his *Chronology*, that in *Anno* 1427. he noteth the Winter to pass away without cold; For (saith he) it was *Hyems sive frigore*. Whereupon calculating *Saturns* place for that time, I find it in the midst of \aleph , the sign of his greatest distance from the Earth, where he suffereth all the debilities which before I have shewled

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the Sun to do in Winter, and therefore material to be considered for our purlpose. For though he be not in (b), yet seeing both those Signs have equal declination, I hold it all one. The like oblservation therefore I desire them that impugn this Art most, and are not obstinate, to make for their own satisfaction, and I know that when they find *Saturn* to have been and to continue still in his greatest remotion and weakness, they cannot but subscribe unto his virtue in cold effects, seeing it is so manifestly confirmed, that generally our Winters are the coldest when he is strongest in opelration, and so milde and temperate when his Beams are not able to express their qualities.

CHAP. XIV.

Intension and Remission by the Motion of the Planets.

NExt the scituation and place of the Planets, that Intension and Remisision which hapneth by these Passions that

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result from their motion through the *A*/*namaly* of their *Eccentricks* and *Epi/cycles*, are not unfit to be considered. Not that the diversity of Motions alterleth the nature of the Planets, which is ever the same, but because in regard hereof they work not after one manner in every place, nor yet alike in the same place at the same position, but diversly in all places, as the force of their operation is increased or diminished through this diversity of their particular motions, and then diversly applyed by the diurnal Relvolution of the Heavens unto the matter of *sublunary* things. For as is well known to those that are acquainted with the *Theloricks*, the Center of their *Orbs* differing from the Center of the *World*, causeth them in respect of us to move irregularly, as sometimes Directly, according to the succession of the Signs; sometimes Reltrograde, and against their order: their Motion also for the same Reason being sometimes swift, sometimes slow, and sometimes nothing at all but stationary. Which great diversity must of necessity cause variety in the manner of their opelration. For as the motion of a Planet

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that is *direct*, doth greatly avail to his ^{*} long stay and continuance above the *Holrizon*, in that it comprehendeth more then one intire period of the *Aequinoctilal* in his diurnal Revolution: So that Planet which is *Retrograde*, seemeth not only to forsake his own natural course, (because the proper motion of every Planet is performed towards the East,) but besides, he is also esteemed purposely to refuse that opportunity of strengthening his operation by long continuance above the *Horizon*, which, by holding on a dilrect course, he doth obtain. Yet notlwithstanding my opinion is, and both Reason and Experience do confirm it, That *God* hath not vainly ordained this Law in their Motions, but that it doth rather evidently admonish us, that this *Planet* doth (as I may say) by this Retrolgrade Motion assuredly purpose some particular effect, considering he seemeth rather to violate the constant Decree of Nature, then it should be unperformed. In which respect *Astrologers* use to call * such an Application as hapneth by Relgression to a Planet that is direct *Violent*, or the doubling of the effects. And

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moreover it is to be observed, that a Reltrograde Planet doth, by means of this * passion, pass, return, and re-pass the same small Ark of the *Zodiack* thrice in few days, whereby the former loss, which he suffereth through interruption of

his dilurnal Ark, is as it were treble recompenised by his three-fold reiteration of the same course.

CHAP. XV.

Intension and Remission by Parallelism.

I Have before spoken of the place and motion of the Planets; now I intend to shew, That the *Parallel* which the Planets describe by reason of their place and Motion, is likewise of great force to cause Intension and Remission, when any two, or more of them, happen to describe the same Circle aequidistant from any of the *Tropicks*. For then having equal Delclination ^{*} towards the same side of the *Aequinoctial*, they rise and set exactly in the same points of the *Horizon:* they

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come to the *Meridian* at the same height; the Ark also which they delscribe above the *Horizon* as well as unlder the same; by reason whereof their Beams succeeding one another, shall not only impress the very same line uplon the Earth, but besides in their like scituation and distance of each side of the *Meridian* their Beams shall make right Angles of Incidence, whereby at that time they are also united by reflexion; as in this Figure.

[illustration] Diagram.

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Where let N H M F be supposed the *Horizon*, M N the *Meridian*, H F the *Aequinoctial*, D E the Tropicks, or some other *Parallel*; A B the two Stars which are turned in the same: and withlout further demonstration it is evident to the eye, That if A rise at the point D in the *Horizon*, pass the *Meridian* at O, and set at E: the Star B moving in anolther part of the same Parallel shall do the like, and coming-to an aequidistant scitulation with A from the *Meridian*, the Angle B O C shall be equal to the Angle A C O, being the Angles of Incidence to both Stars; by means whereof B shall of necessity reflect unto A, and A to B, which is of great moment in their opelration, especially to them to whom the same hapneth to be perpendicular. And here by the way we are to note, That by * how much neerer the *Tropicks* this Palrallelism doth happen unto the *Planets*, either amongst themselves, or with the fixed Stars, so much more effectual the same shall be, because of the slow varialtion of their declination which will cause them to continue Parallel the longer tolgether: whereas neerer unto the Aequilnoctial

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it is of less moment, because their declination varying swiftly, will also as

suddenly vary their Parallelism. And thus much concerning the natural Realson of Intension and Remission, which hapneth while the Planets and fixed Stars do thus follow and wait one upon another, and by means thereof imbrace and infold every thing whereon they shine, as if equal care were committed to both their charges, as they are carryed about by the wrapt Motion of Heaven.

CHAP. XVI.

Intension and Remission by the rising and setting of the fixed Stars and Planets.

NOw forasmuch as the common *Ax/iome* testifieth, that Nature hath made nothing in vain, we may not think, that the rest of the Stars which are fixed do stand for Cyphers, although it be true, that the action of every particular fixed Star be not so evidently discerned as the Planets. Neither (so far forth as we are

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able to attain by experience) do they ^{*} cause any sudden and unwonted alteraltion by themselves, but rather by reason of their uniform Motion, and the same perpetual distance which they retain one to another, they work still after one maniner, saving when their virtues are accildentally ^{*} stirred up by their 1. risings and settings with the Sun, and the rest of the Planets; or 2. when their Beams are ulnited, either by Configuration and Paralilel, or by 3. reflection in the same vertical Circle with them, at what time the quality of their impression dependeth upon their Nature, which partly is measured by Experience, and partly confirmed by ^{*} their Colour, as they resemble the Planets therein. But the quantity of this Initension and Remission is guided by their apparent Diameters or Magniltude.

And first, how much the Ancients ^{*} have ascribed to the rising and setting of the fixed Stars, not only for distinction of *Times*, but also matters of *Physick*, *Wealther, Navigation, Husbandry*, and the like, is familiar to every man, though meanly conversant in *Phylosophy, Phylsick*,

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History, or *Poetry*, as well as in *Alstronomy*. For such was their skill herelin (as *Theon* testifieth) that the Astrololgers ^{*} of those times did hereby both limit and assign the beginning of the Seasons, and the particular state of the Weather for every day, foretelling which should be fair, which rain and tempestuous; and again, upon what days every particular Wind did usually blow. And thus relducing all *Metons* Circle of Years into Tables, they communicated the same to all the Cities of *Greece* for the common good. The truth whereof is not a little confirmed by *Ptolomy* himself in his ^{*} Book *de inerrantium Syderum signifilcationibus*, (not that supposed on, set forth by *Leonicus*, but that which *Freldericus Bonaventura* of *Urbin*, not long since, translated out of Greek into Latin) wherein, besides experience of the *Aelgyptians*, he also recordeth the Observaltions of the most famous *Astronomers* before his time; as of

Dosith•us, Phillippus, Calippus, Euctemon, Meton, Colnon, Metrodorus, Eudoxus, Caesar, Delmocritus and Hypparchus, for the place of their particular dwellings, even to the

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fifth *Parallel*, passing by the midst of *Pontus*, where the longest day is fifteen hours and a half. Not without Reason then doth *Ptolomy* both here, as also in his *Quadrupertite*, remit him that will ^{*} judg of the particular Intensions and Relmissions of every day unto the risings and settings of the fixed Stars; whereof, although he setteth down eight kinds, yet doth he reduce them all into two *Species, viz.* the *True*, and the *Appa/rent;* And if these, I see not that any of ^{*} the *Astronomers*, before named, have had a regard to the first kind, but only those which are apparent: The first whereof *Ptolomy* reckoneth the Emersiton, or *Matutine* oriental apparition; the second is (as he placeth them) the *Vespertine* oriental Apparition, which he calleth the last rising. In like manner there be two apparent Settings, wherelof he calleth the first *Matutine* and Oclcidental, and the last *Verspertine* and Ocidental, which is also their Orcultation. How far therefore those *Prognosticaltors* do err, who quite otherwise then the Ancients, did refer their yearly Judglments the true rising and setting of the

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Stars, omitting the apparent, I leave to their own censure, if they know not their Error before. But forasmuch as those that are supputated to one partilcular

* place will not agree the same day to every *Horizon*, let none from hence take occasion to calumniate *Astrologie*, if the effects do likewise differ in divers *Horizons;* but rather let them learn for this Cause the more to admire the Art, for that from hence chiefly the true Realson doth grow, why in several Elevations the Weather is oft times differing upon the same day, seeing that in a small differ!ence of *latitude* both the Emersions and Occultations may vary divers days; Wherefore the Effect must accordingly follow the Cause. The Reason why the apparent Risings and Settings are prefer!ed by Antiquity before the true, is not expressed by them, but leaning simply upon observation and experience, they commend the same in their Monuments to Posterity, neither in truth was it nelcessary, * seeing the Reason was evident in it self. For who doubteth that the sublstraction or addition of Light may beget such a new degree of temperature in the

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Air, as is sufficient to Mutation? As we see it often to happen in *Distillati/ons*, where the alteration, though of a very small heat, doth either perfect, or give impediment to the work. But * whereas for the most part this Mutation turneth unto moisture, this is purposely to be imputed to the great quantity of borrowed light wherewith they shine. For (as it is held in the *Perspectives*) there is no doubt but that the Stars do as well reflect unto us the light of the Sun, as shine

with their own proper light: Wherefore the Suns light being debilitated by reflection, doth heat imperfectly, being for that cause fitter to resolve and cause moisture to flow, then to consume the same, being stirred. And here is further to be noted, That *Ptolomy* doth not require the apparent rising and setting of all the fixed Stars; for it is clear in that Tractate of their significations, that he neglected all, but those of the first and * second Magnitude, whereof he giveth two Reasons; one, because the exact Emersion and Occultation of the lesser Stars cannot be observed, by reason that their weak light is not able to overcome

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the twi-light; whereby the Arks of their Apparition being uncertain, the Appariltion it self cannot be calculated. The other Reason is, because these more noltable Stars are for the most part so conlveniently scituated, as the Appearances of the lesser, hapning much about the same time, are not so to be regarded, as these that are more illustrious. And thus (for example) he thinketh it enough to observe the apparent Risings and Settings of *Arcturus* and *Spica*, though we pass *Vindimiatricks* in silence; neither careth he much for the *Haedi*, or the *Vergiliae*, or *Hyades*, so he observe *Hircus*, and the brightest of the *Hyades*. Wherefore *Ptolomy* hath not supputated these Aplparitions * for above 30. my self coming short of him by 6. For more of the first and second Magnitude do not rise and set to us, because the declinations of dilvers do exceed the complement of our Pole; and therefore if the Sun be septenl•rional they never set, as *Lyra*, *Lucida Persei*, *Dexter humerus Aurigae*, *Conl•a*, *Cygni*, and the like. Or if this excess be *Austral*, then they do never •ise of which kind *Canobus* and *Pes*

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Dexter Centauri be, which are never seen above our Horizon.

CHAP. XVII.

Intensions and Remissions by Configuration of the Stars.

THe Causes hitherto mentioned, allthough they be very divine, and contain much excellency in them, yet they come all neerer the nature of Matter then this which followeth. For the manner of their operation did consist chiefly in a certain flux and emission of light contilnued down to these *sublunary* bodies, which although it be commonly thought without *matter* or *time*, yet it is not without the demensions of *Quantity*.^{*} For it is made by a *right line;* it is attelnuated by the distance thereof from the *Star;* it increaseth or decreaseth with the face of the *Planet* it self; it is hin/dered by opposition of a *shady body;* and lastly, the visible presence of the Star admitted, it is necessarily presupposed allso. Neither is this found in one and the

same single star, considered by it self, but in comparison also with others. As belcause the *Sun* and *Moon* excel all other Stars in their visible magnitude; therefore their action is most evident: but in the rest, whose visible *Diameters* are not comparable to the Suns or Moons, their efficacy is hardly sensible, and not to be attained without long experience.

This cause therefore which followeth and belongeth equally to the *Planets* and fixed *Stars*, is more noble, and to be adimired then the other. For this savoreth nothing of *Matter*, but hath only consideration * of *Form*, not so much respecting the streight beams of light which flow from every Star, as valuing and esteeming how their Beams meet at the Earth between us and their Light; but both when they are hidden under the *Horizon*, and seem above the same, it maketh the efficacy of the Stars more notable over all the World, then at olther times. Which kind of operation, if the Stars be swift in Motion, is in a manner but momentany; for that the Geometrical Angle being changed into

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another Angle that is improportionable and improper, immediately, or not long after, this efficacy also ceaseth, though the light of the Star at that time chance to increase. For which Cause I give not so much regard to the Aspects of the *Moon* with other Planets in the alteraltion of the Weather, as unto the Confilgurations of the *Planets* among them selves, or with the fixed Stars, whose motion being but slow in respect of the *Moons*, doth not so suddenly vary the Angle of their Configuration at the Earth.

From hence it is therefore that those Arks or Portions of the Heaven allotted unto the Aspects are not so much esteemled above all other Causes in *Astrological Judgments*. For although it be true, that in all Scituations the Stars send forth their Beams unto all the parts of Heaven and Earth which they behold, as may be argued out of *Vitellio* his *Demonstration*,^{*} by means whereof the Beams and Lines of true motion in every two Stars do reltain a mutual respect one to another, and so do evermore intercept some Ark of Heaven, and concur at some Angle of the

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Earth, which may seem to make an Aslpect among themselves: Yet neverthelless all the ancient and modern *Astronolmers* following *Nature* for their Guide, have heretofore regarded these few Conlfigurations only, being but five in all, namely the $\sigma, \star, \Box, \Delta$, and σ° : amongst which, although the first do not commonly go for an *Aspect*, because every *Aspect* is reputed a proportioned dilstance between two or more Stars; yet nevertheless seeing a certain Position of the Stars in the Zodiack is rather consildered in this Position, then any diversity of place, and that the enumeration of the *Aspects* ever beginneth from the Conljunction; Therefore as well in respect of this *Analogie*, as of the received use, it may not be secluded out of the Numlber of *Aspects*, specially knowing that the Beams of the Stars are as well extended upward and downward, as obliquely and collaterally. But if any man desire further to be satisfied of the Reason which first moved the ancient *Astronomers* to observe those distances and Arks assigned unto the *As/pects* as of more virtue then any other:

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Surely the Answer is easie, seeing Nature it self every where, both in the motions and effects of the heavenly Bodies, as also in other Arithmetical and Geometrical respects, chiefly celebrateth these very proportions with a singular Prerolgative. *Picus* speaking hereof, thinketh * they were first induced hereunto by oblserving the several illuminations or ages of the *Moon*, for that when she is *new*, *horned*, in her *quarters*, *gibbossity*, and *fulness*, her forms are still changed at these proportioned spaces from the Sun. Besides which, it is not to be passed in silence, which others have more particularly noted, that in her annual Revolution she is still found about the \triangle of her own place in the beginning of the former year. Neither have other *Astronomers* failed to note, how *Nature* pointeth (as it were with a finger) particularly unto every Configuration, while we consider the motions of the other Planets. For thus *Abohazer* wittily affirmeth the two inferiour Planets in their Stations to observe the Ark proper to a \Box aspect. *Pliny* likewise with him as skilfully com/mendeth * unto us the observation of the

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 \triangle by the stations of the three superior Planets. But above all it cannot be conlsidered without deep admiration, how Nature hath singularly nobilitated all the *Aspects* in the Motions of *Saturn* and *Jupiter*. For as their Conjunctions are rare, and but once in 20 years, so hath Nature evermore disposed these Conljunctions in the most memorable places of the *Zodiack*, That is only in such Signs as behold one another in an *aequilater triangle* inscribed. For between any two great Conjunctions of *Saturn* and *Jupiter*, there are 19 *Aegyptian* years, 318 days, and 13 hours, in which time those *Planets* are moved from the place of their former Conjunctions 8 signs, and almost 3 degrees, which excess of 3 delgrees is the cause why after 10 Conjunictions they pass from one *Triplicity* to another, and one *Triplicity* continueth 198 equal years, 2•5 days (the intercalary day of every fourth year omitted) and 10 hours. But the Revolution of all the *Triplicities* is finished but only once in 794 equal years, 331 days, and 16 hours. Or otherwise, in 794 *Julian* years, 133 days, 16 hours; the double whereof

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cometh to 1588, which number of years they are thought to have respected, that ^{*} imagined the year 1588. from the birth of Christ would have been so fatal. From hence therefore it is, that not without cause they are called great Conjunctions, both hapning rarely, and abiding thus in one Triplicity almost 200 years together, and not finishing all the Triplicities of the *Zodiack* in much lesser then 800 years, not having therefore reiterated all the *Triplicities* 8 times

since the beginning of the World. Neither are the other Positions of these *Planets* to be neglectled; for if any man will take the pains to observe when *Saturn* and *Jupiter* do behold one another with a \Box or ∂° aspect, they shall evidently perceive that they still carry such a regard unto the signs or places of their precedent and next Conjunctions, as evermore they irradiate the one and the other with a \bigstar , \Box , \triangle , or ∂° aspects. And so this shall suffice (if it be not more then enough) to shew how Nature hath alured us to the Conlsideration of these *Arks* by these *Aspects* in the particular Motion of the *PlaInets*.

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And now in a word to confirm the * same by their virtue and effects: First, The *Physicians* are taught by experience, That the *Crisis* of all sharp diseases have a notorious and most memorable *Sym/pathy* with all these five Configurations of the)) to the place of her Being in the beginning of the sickness. Thus also we see the Seas themselves in their Tydes to dance as it were after the motion of the)), while their Spring and highest Floods always concur with her σ and σ° to the *Sun*, as their Neaps and lowest Tydes do likewise respect her Quarters. And as memorable a thing it is, that the Seas in their dayly flowing and ebbing upon evelry Coast, have still a constant respect only to such *Azimuthal* Circles as are in a quartile positure when the)) passeth by them. To conclude, it is more manifest then that I need to insist upon it, that the *Sun* it self seemeth greatly to respect the \Box , in that he moderateth the vicissitudes or four quarters of the year by his ingress into the four *Aequinoctial* and *Tropical* Points.

But now to descend to other Speculations of the learned more mystical then

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these, it is not amiss to begin with the *Arithmetical Observation which Julius Firmicus maketh of the number of Signs agreeable to the Aspects; 1, 2, 3, 4, 6, answering in order to the σ , \star , \Box , \triangle , & σ : for these numbers only, and none other, will divide the Zodiack, consisting of twelve Signs, for which reason he maketh them the only aliquate parts of a Circle. Thus also the famous *Ptollomy* addeth not a little to the dignity of * these *Irradiations*, when he first observed the *Geometrical* proportion, which the *Subtenses* of every of these Arks do retain in power to the *Diameter* of a Circle, as every man may read in the *Quadripartite*. Others again, with no less subtilty, have observed, that amongst all regular or ordinate figures that may be inscribed in a Circle, though the same be infinite, there are none whose sides and angles carry away the Prerogative both at the Circumference and Center, but those whose sides and angles are aniswerable to the Subtenses and Arks of their Aspects. For thus amongst all *ordinate plains* that may be inscribed, there are no two whose sides joyned tolgether

have preheminence to take up a *semicircle*, but only the *Hexagon*, *Qualdrate*, and *equilateral triangle*, answering to the \star , \Box , and \triangle , irradiated. The subtence therefore of a \star aspect consistleth of two Signs, joyned to the subtence of a \triangle , composed of four, being regular and aequilater, take up six Signs, which is a compleat semicircle. In like manner, the sides of a *Quadrate* inscribed, subltending three Signs, twice reckoned, do ocupy likewise the mediety of a Circle. And what those Figures are before said to perform, either doubled or joyned tolgether, may also be truly ascribed unto the opposite aspect by it self, for that the *Diametral* Line, which passeth from the place of Conjunction to the opposite Point, divideth a Circle into two equal parts, the like whereof cannot be found in any other inscripts. For example, the side of a regular *Pentagon* subtendeth 72. degr. of an *Octagon* but 45. the relmainders of which Arks, *viz*. 108. and 135. gr. are not subtended by the sides of any ordinate figure.

And thus, as it is before shewed, That the Subtenses of these Aspects be the

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same with the sides of the fore-rememibered * Inscripts, and do only therefore take up the Circumference of a Circle: So it is evident, that the Angles at which they concur be the same wherewith the ordinate plains take up the whole space about the Center. For if we consider the Angle of a \star at the Earth, it is all one with that of an aequilater Triangle consisting of 60. gr. and containeth $\frac{2}{3}$ of a right Angle, but six times $\frac{2}{3}$ of a right Angle makes four right Angles; where fore six *Sextiles* equal to six aequilater Triangles fill the whole space about a point, which is equal to four right Angles. Secondly, Every Angle of a *quar/tile* is a right Angle, and all one with the Angle of *rectangle Quadrilater* figure, wherefore four of them fill a whole space. Thirdly, The Angle which two Stars in a \triangle make at the Center of the World, is measured by an Angle of 120. gr. and so equal to the Angle of a regular *Hexa/gon*, consisting of a right Angle, and 1/• of a right Angle, and therefore taken three times maketh four right Angles: Where fore three aequilater *Hexagons*, or three \triangle Aspects, do also fill the whole space

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about the Center: To which me may not improperly add the opposite Aspect, consisting of two right Angles, and there fore doubled, shall perform the like office with the rest, any other figure of many Angles, however joyned together at the Angles, shall either want of four right Angles, or exceed them. For example, the Angle of a *Pentagon* containeth a right Angle, and • more; wherefore three such Angles placed about a point, shall fall short of four right Angles by $\frac{2}{5}$ of a right Angle; as on the other side, four such Angles shall exceed four right Angles $\frac{4}{5}$.

These Speculations therefore consildered, it were sensless to imagine, that Nature hath so many ways honored these Irradiations of the Stars in vain, and ad|monished us to a special regard of them by so many rare and secret Observations, both in the motions of the Planets, and also in their effects and proportions, if they were not indued with more virtue then others. Wherefore it hath no less exercised the learned to find out the Reason why these few Configurations, selected out of an infinite number, should

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be indued with such eminent efficacy. Neither as yet hath any reason been inlvented, * with more applause for the probability thereof, then that these proporitions, whereof the Aspects are before shewed to consist, be the same which are found in harmonical Concords; for which cause it is also thought no less probable, that the light of the Stars in these proportioned distances should powerfulily affect the matter of *sublunary* things, then that the like *Geometrical Symmetry* in sounds and voyces should passionately stir up the sense of the hearer. For to confess the truth, so hath the admired providence of Nature ordained throughlout all her works, that where due proportion is not wanting, there she never faileth to endue all her effects with such height of perfection, that the same belcomes evident to the eye of every man. And from hence it is even in artificial Compositions also as in Medicines, we know those only to be most kind and solveraign which observe a competent *Symmetry* or temperature of the *Active* and *Passive qualities;* with good likellihood therefore, and appearance of truth,

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do most of the learned, with *Ptolomy* in ^{*} his *Opticks*, resolve the only cause of this efficacy to proceed from harmonical proportion.

And more clearly to express this simillitude * or affinity between the proportions of the Aspects, and the like distances observed in the Musical Concords, we must understand, that all Harmony what soever springeth originally from three such terms of numbers as respect each of ther in such sort, that still their differences retain the same proportion that is found between the extreams. For example, in these three Numbers, 6, 4, 3, (an swerable to the Signs of the σ° , Δ , and \Box Configurations) here it is evident, if we compare the extreams with the mean, that 2. shall be the difference between 6. the first, and 4. the second Number; and 1. is in like manner between the middle or second, and 3. the third Number: but 2. is double in proportion to 1. therefore 6. the first number respecteth 3. the third number with the like proportion. The *Analogie* of which Proportions, as is before remembered, is found to be the fountain of all Musick, rising originally

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from these three simple concording dilstances, which by the Musicians are called **Diapente*, consisting of a Sesquialter *Pro/portion*, as 6. to 4. or which is all one of 3. to 2. *Diatessaron* of a *Sesquitertia*, as 4. to 3. And lastly, *Diapason* consisted of a double proportion, as 6. to 3. or 2. to 1. and is as

much in value, as both the 2. first distances and proportions put together: For a *Sesquialter* added to a *Sesquitertia*, according to the art of Proportions, do produce a *Diapason*, or doulble proportion, such as is found between the former extreams compared together, *viz*. 6. and 3. And in like manner, by comparing the *Diapason* with both these his parts, that is, with the *Sesquialter* and *Sesquitertia*, according to the usual manner of supputating Proportions, we are brought to the two other compoundled or imperfect Concords, so constituting the 5. first and natural Distances in harlmonical Sounds, which afterward, as they be diversly mixed between them selves, produce infinite variety of all kind of Melody.

After the same manner fareth it with the light and influence of Heaven. For

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although anciently there be but 5 Irradil•tions observed as most apt to action, namely the , , , , , ,, , ,, and *; yet neverltheless there is nothing more sure, then that by the harmonical mixture of these proportioned Beams, the generation and corruption of this mortal world is infinitely varied. Wherefore as the force of •ll Harmony, so likewise the effectual •eason of all action in the influence of the Stars, is properly deduced from the foreIsaid *Symmetry* of these distances. And therefore more fully to illustrate, that the ^{*} Angles of the Aspects, compared between •hemselves, concur with these Harmonies •n Musick, it will be no hard matter, if •hat which before hath been often reIxated be called to mind: As that first, •he Stars in an opposite or diametral •spect are disIjoyned by the space of two •ight angles, which are measured with •he Ark of 6. signs, or 180. degrees of Circumference, and that the , consisting of 4. signs, or 120. degrees, is in value one •ight angle, and $\frac{1}{3}$ of a right angle: Also •hat the \neg taketh up one intire right anl•le, and is subtended with the Ark of 3. •...gns, or 90. degrees. And lastly, that the

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★ is constituted but of 2. signs, or 60. gr. which is $\frac{2}{3}$ of a right angle; which being thus, if we now so compare the two right angles of the $\frac{1}{2}$ taken together with the angles of the rest of the aspects, either the \triangle be placed between the $\frac{1}{2}$ and the \Box , or the \Box between the $\frac{1}{2}$ and the ★, we shall find either way three numbers, which admit all the Laws of harmoniacal Proportions, as in these Figures following is evident. *

[illustration] Diagram.

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Where, to let the rest pass as plain elough of it self by that which is before spoken, we are further to note, That the σ° , compared in the last figure of those

two with the \star , hath a triple proportion to the same, compounded of a double and *sesquialter* proportion, as *Diapente* with *Diapason* in Musick is, and so is found no simple or perfect Aspect, but exactly * answerable to B flat, the first imperfect or compounded Concord in Musick being a sixth from G *Sol re ut*, which neverthelless in some respects is after a sort elsteemed perfect, because it useth the same division compared to D *sol re* that the perfect Concords do, for it is half a Fifth, and scituate in the middle between Γ *ut* and D *sol re*. As also the \star compared with the \triangle is a just half thereof, which before hath been shewed to be in a *sesquialter* proportion to the σ° , as D *sol re* is to Γ *ut*, and therefore exactly algreeable to a *Diapente* in Musick, which the rather I here note, because we shall have some use thereof afterward in speakling * of the new Aspects. And thus much shall shortly serve for the *Theory* or Phillosophical speculation of them that alscribe

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the efficacy of these Irradiations to the harmonical proportion which is sound between them. Wherefore seeing they carry the same mutual respect one towards another, which the foresaid Harmonical Concords do retain between themselves, what wonder is it if Nature in her operations, as well by lights as by sounds, admitted no other *Symmetry*, but that which is derived from these proportions, rejecting all other as irratilonal and discordant?

Yet all this hitherto doth rather illuistrate ^{*} a *Simili*, and doth more and more express unto us, that Nature indeed hath adorned these proportions with singular priviledges above any other, then satisfie us with the true Reason, why in the infinite variety of Sounds and Lights these only should consent most sweetly in Mulsick, and be effectual in the operations of Nature. Neither hath any man herein endeavored with more probability to give satisfaction unto the learned then *Kepler*, who having wittily laboured to demonstrate, That God in the Creation of the World hath observed the same proportion in the Magnitude and distance

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of the heavenly *Spheres* which is found in the regular *Solides*, which (as *Geomiltry* teacheth) have their Original from the Ordinate Playns: In the end concluideth with good probability, That the heavenly Motions shall then consent sweetly, and co-operate strongly togelther, when the nature of these *sublunary* things, indued (as he supposeth) with a sensitive or knowing faculty, apprehendleth the Beams of the Stars to observe that respect in their concurrence at the Center of the Earth, which answereth unto the Ordinate Playns, from whence the *Regularity* of these proportions is derived, as the impressed *Characters* of that *Symmetry* which *God* is said to have used in the Creation of the World it self. So imagining, that as often as the nature of any thing meeteth with these proportions, it exerciseth it self as it were by this *Idea*, which it retaineth still, and that in such sort, as what it doth but ordinarily and slackly at other times, it performeth now much more effectually, and as it were with extraordinary diligence; Not (saith he) that these proportions work

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Musick it is neither the Sounds, neither the proportion of the Concords, that work any thing of themselves, or beget any delightful humor in a man, but the Soul approaching to the Instruments of Sense, first there entertaineth the sounds inwardly, then valueth their proportions, and (finding the same good and *Geomeltrical*) lastly exhilarateth it self, and moveth the body wherein it is, as with an Object wherein it taketh delight. And surely were these proportions set * down by *Kepler* exactly found in the *Symmetry* of the World, then I could the better give ear unto him, and believe this Mystery to rest in that which he hath said. But he himself having inscribed the several *Spheres* of the Planets within the *Regulare* bodies, in the end findeth their distances from the Center of the World to differ very much, both in *Julpiter*, the Earth (which he suppose th to occupy the *Suns* place,) and *Mercury*, from that which *Copernicus* and other *Alstronomers* do set down by observation. I love not (after the expectancy of *Geomeltrical* demonstration, though he come near in some) to feed my self with Fancies

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in the rest: neither can I well conceive, in that poor understanding which I have in *Philosophy*, how Configurations, consisting only of intelligible Angles, should be objects to any sensitive power; or how the sensitive power, which he doth imagine in the Elements, and all elementary things, should apprehend without organical Instruments. Yet nevertheless ^{*} (leaving this Conceit of *Keplers*, withlout prejudice of his Conceit or JudgIment, unto others of riper Judgment then my self) I will as perspicuously as I can deliver that which my self have further considered as the Reason why these Beams should be more effectual then others. And first concerning the \circ and \circ° , I held my self abundantly satisfied with the union of Beams, which therefore are the most potent and powerful Configurations of all others, as is evident in this Figure, where we see the Beams, as well incident as reflected, to be united.

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[illustration] Diagram.

For let A be in \circ here with B, it is first manifest, that all the Beams flowing from G and E, the points of touch in the Cirlcumference of A shall unite themselves with the Beams that art sent from B to C the Earth or Center of the World. Selcondly, We are also to observe, That in this Case only the Beam A C, or B C,

coming from the Center of the Stars relflecteth into it self, as being only perpendicular, whereas those Beams which are sent from the points E and G make an acute Angle at C, and do therefore relflect the one into the other at equal Anlgles, as G C reflecteth from C to E, and E C from C to G; last of all the unilon that hapneth in \mathcal{P} is manifest without more circumstance, where the Beams sent from the opposite Points make but one streight line, as G F, and E H in this Filgure, except in Cases where the Earth * is bigger then the Star in opposition, for there without latitude the union of their Beams must needs be hindered by interposition of the Earth. For which cause it is specially here to be remembered * in the σ of the two inferior Plainets with the Sun, that if this happen in the *Apogaeon* of their *Epicycles*, their σ shall not be of that efficacy or force, as when they are in *Perigaeo:* because (according to the *Hypothesis* of *Tycho* and *Copernicus*) they being above the Sun, and the Sun much bigger then they, the Sun shall return all their Beams to themselves from the Earth, so that their

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union by this means shall be interrupted and frustrate.

In like manner, in my contemplation for help in the Configuration of the \star and \triangle , I found that which did reasonably give me contentment, because in the concurrence of their Beams at the Earth I found a mutual Reflection of the one into the other, and so an Union by Relflection.

[illustration] Diagram.

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For admit A B C to be three Stars, A and B in a \star Configuration, A C in a \triangle : Then for so much as B F, the Beam incident of the \star , falleth obliquely in respect of A F, and maketh an acute Anlgle therewith, it is evident to those that have any mean understanding in the *Oplticks*, that B F shall reflect to C, and so be united to C F, the incident of the Star * C, which is in a \triangle Configuration with A: as also C F shall for the same Reason reflect to the Star in B, and be likewise united with B F, the incident of the Star at B. Behold here by the way the grounds of that familiarity which *Ptollomy* noteth in these Arks of Heaven, when he considereth the Position apt for the *Aphaeta* of life, or the Houses of the Figure. And thus far me thought I purlsued the Reason of that virtue which is found in the Aspects with good encoulragement, that I should have found their force to depend upon Union or Reflexilon. But when I come to consider of the Quartile, whose Beams only cut each other *ad angulos rectos*, and so reflect into themselves, after much deliberation with my self, finding all aid of the *Opticks* to fail me, I was forced to say with *Offusilus; Ingenué fatebimur causam talis*^{*}*effectus nos demonstrare non posse: id tamen verissimum esse tam diuturna oblservatione compertum habemus, ut ea de re dubitare puderet.* Wherefore relcounting with my self some of those Spelculations before remembered, and specilally that *Theoreme* which prove the Anlgles of the \star , \Box and \triangle to be only proportionable in taking up the Center of the World; the more I considered thereof, the more I find my self confirmed, that the mystery or secret of these Configuraltions resteth chiefly in this, that these only Irradiations, and those that are derilved from these, are proportional unto all patille matter, & therefore more effectual.

For that these Irradiations only are every way proportionable is before albundantly ^{*} proved, whether we respect the taking up of the Circumference, the power and proportion of their Subtenses unto the *Diameter*, or lastly and principally, the occupying of place at the Center

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of the World. Which Prerogatives seeling no other Arks, Subtenses, or Angles do enjoy: therefore I conclude these albove all others to be proportional unito the whole *Systeme* of the World. For that is truly said proportionable, which is neither *defective, interrupted*, nor *redundant:* but such are the Arks, Subtenses and Angles of those Irradiations, and none other; *Ergo*, these and none other are proportionable. Now as that which is defective, and wanteth proportion, leaveth the action frustrate, and without effect: so that which on the other side offendeth in excess, must needs incur the contrary fault, and overlcharge that which either Nature or Art intendeth, whereby of necessity it will follow, that there being no defect, nor excess, but an equal and just mixture of the influence of the Stars in these Irradialtions, these only shall be apt and convenient to produce agreeable effects in the matter of all *sublunary* things. For it fareth in these effects, which are produced by the mixture of Light and Inlfluence, as with *Chymical* Operations, where the defect of heat produceth nolthing; as on the other side excess doth

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either by *Sublimation, Eruption, Vitritfication*, breaking the Vessel, and the like, destroy the work. And to make it yet clearer, how the Beams of any such Stars do proportionally take up the Center of the World, whereas, in that which went before, I have only shewed how the Points of those Ordinate Playns, where unto these Configurations have been compared, often reiterated, do take up place. *

Now will I set forth how the Beams of any two Stars in any one of the former Configurations shall take up more space, then that which is comprehended beltween their Incidents or Beams of true motion, and how by their Beams, either incident, reflected, or opposite, they do possess, and take up the whole Center of the World at one instant with proportionable Angles. For evident demonistration whereof concerning \circ and \circ° , (whose force rather dependeth

upon union then proportion) I need no further labour, then to refer the Reader to the view of the last figure but one, where he seeth the united Beams of such Stars as are in \circ & \circ to surround the Center, and all

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elementary matter whatsoever subject unto the actions of Heaven. And so for the \Box , whose Beams incident and oppolsite, traverse the Center of the World at four right Angles, *viz*. AFG, GFI, AFH, and HFI; seeing four Points of a rectangle quadrilater figure hath been before proved to occupy place, I likewise need no other proof, then that the Reader will in the last figure consider how these four right Angles made by one *Quartile* take up the Center of the World. But concerning the \triangle and *, although the like be evident enough to any of mean skil, yet nevertheless there are some other speculations which require a word or two more. For in the last figure suppose two Stars A & Birradiate the earth with their * Beams, although it be true, that by the protracting of the opposite Beam from F to D, the Center of the whole World seemeth occupied with proportionable Angles, BFA being subtended by the Ark of 60. which is before declated to be the Angle of an ordinate *aequillater triangle*, and so leaveth the outtward Angle BFI equal to the Angle of an ordinate *Hexagon*, subtended hereby

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the Ark 120, which is the Ark of a \triangle ; the like being also to be understood of the Angles made by the opposite Beams *ad verticem*. Yet nevertheless we are here further to consider, how the incident Beam of B, *viz*. BF, reflecteth unto C, and so taketh up the whole *Semicircle* ABCI, with three \star , *viz*. AFB, BFC, and CFI. In like manner, if we consider C to be in a triangular Configuration with A, we see that as the opposite Beam of A, *viz*. FI, maketh a \star with the incildent Beam of a Star at C, *viz*. CF; so CF being the Beam incident of the Star C reflecteth also to the Point B, and so maketh the same three \star , wherewith the aforesaid whole *Semicircle* is taken up, as is before demonstrated. Wherefore this may satisfie the indifferent, how any two Stars in any of these Configurations do proportionably ocupy the whole CenIter of the World in the same moment, without reiterating the same Angle.

And because hitherto we have spoken only of the old Configurations, known to the ancient *Astronomers*, I may not forget to signifie, that in these our days our late Artists (whereof *Kepler* is the

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chief) have added unto these former * Aspects three others, *viz*. the *Quintile*, consisting of 72 degr. the *Biquintile* of 144 degr. and the *Sesquiquadrate* of 135 degr. so making 8 Configurations answerable to the 8 Consonant Stops in a *Monochord*. Neither dare I for my part contradict these new additions: For halving made trial as wel in the speculations of the Weather & Meteors, as in

the accildents of Nativities, I dare boldly affirm, That there have divers events and effects concurred with these new Configuratilons, for which, without these Consideraltions, we can find as yet no Reason at all in *Astrologie*: Neither wanted they true grounds of Reason for this their Obserlvation. For as in Musick there be but 3 perfect Concords, *viz*. the *Diapason*, *Dilapente*, and *Diatessaron*; so in *Astrologie* there are but 3 perfect Aspects answeralble to the foresaid *Harmonies*, namely the \mathcal{O} , the \triangle , and the \Box , the \bigstar being aclcounted, and so proved before to be but an imperfect Aspect, answering exactly to B flat, the first among the imperfect or compounded Concords. Wherefore considering that the first 3 perfect Conlcords

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are found to have their perfect AsIpects answerable unto them, and that B flat being an imperfect Concord is also found to agree exactly in proportion with the \star , being an imperfect Aspect: This gave *Kepler* first cause to suspect that the other Harmonical Proportions contained in the same *Monochord* might also have their Aspects, *viz*. the *QuinItile*, *Biquintile*, and *Sesquiquadrate* answerable unto them; wherefore allthough as yet I have not entered into any other *Geometrical* Speculation, why these distances are also effectual in opelration as well as the former, thus much for this time may suffice, both for the occasion of their first invention, as also for their probability to be observed in practise.

And now having thus discoursed at large of the Dignity, and diverse Reasons of these Aspects or Configurations, which are so powerful in operation, I shall conclude with this desire, that two things more may be further noted.

First, That we are not only to regard these proportioned Distances among the *Planets*, but also of the *Planets*

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with the *fixed Stars*. Which *Specula*/*tion* as it hath been heretofore omitted by others, either through loathness to calculate the Aspects of the *fixed Stars*, or through neglecting them altogether; so undoubtedly it hath been no small cause, why our *Prognosticators* have failed in their Judgments by omit/ting a principal part of their Direction.

And secondly, That where we finde plenty of Aspects, especially coming to gether, it is a manifest Argument, that plenty of matter stirred up will follow, which will cause great alteration of the Air apt for the Season.

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AN Astrological Judgment UPON The great Conjunction of Saturn and Jupiter 1603. being its first Entrance into the Firy Trigon.

Sent by way of Letter from Sir Christopher Heydon Knight, to Doctor Foster.

UPon the 3 of *Decemb*. An. 1603. being desirous (as the Weather would give leave) to observe the places of *Saturn* and *Jupi/ter*, that thereby I might attain unto the true time of their σ at hand, I fitted

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my self as well as I could in the morning about 7 of the Clock to take their Dilstances: but at that time the Air being cloudy, and the Heaven only favorable about the *Horizon*, I could perceive *Julpiter* only in his Matutine Emersion, newly appearing out of the Sun-beams, but *Saturn* at that time was not to be dislcerned by the youngest eye there. Where fore I only at that time observed *Jupiter* his distance *a lance Meridionali*, 27. gr. 33. m. 30. sec.

The place of *Lanx Merid*: according to *Tycho*, was then 9. gr. 33. m. 30. sec

Wherefore seeing *Jupiter* his latitude by the *Ephem:* was 54. m. *Sept.* and the latitude of *Lanx Merid:* 26. m. *Sept.* agreeing thus in the denomination of your latitude, and so near the *Ecliptick*, it is evident that *Jupiter* his place was *quoad longitudinem*, without more Calculation, 7. gr. 7. m.

The three day following, *viz*. 4, 5, and 6. were very foul and stormy, but the seventh being frosty in the morning, gave me reasonable opportunity to attend this business again, at what time we believed both *Saturn*, *Jupiter*, and *Mer/cury*

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in an *Isoceles* triangle almost, plealsantly representing the beginning of the firy *Trigon:* But the day being broken, and the Sun approaching apace, we were fain to take such Observations as we could of *Saturn* and *Jupiter*, and let *Mercury* alone.

Wherefore, hor. 7. m. 25. I observed *Saturn* to be distant from *Lan: Meri/dional* 28. gr. 24. m. 30. sec. *bis*.

And *Jupiter* from the same fixed Star twice also, hor. 7. m. 40.-28.2430. at what time *Saturn* his light, contending with the breaking of the day, was very weak; therefore we began with him, and ended with *Jupiter:* and by this Observation I then concluded, That I thought it the Will of God I should have opportunity to observe the true moment of the great Conjunction, which, as

appeareth by these distances, happened in the 7 gr. 58 m. of \aleph , for oltherwise they could not both have had equal distance from the same fixed Star, lying parallel in effect with them to the Ecliptick.

I also observed both Saturn, Jupiter and Mercury upon the sixteenth day,

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Hor. 7. m. 15. *Saturn* from the said Star 29. g. 28. m. *paulo plus*, 9. g. 1. m.

Hor. 7. m. 15. *Iupiter* from the same Star 30. g. 22. m. 30. sec. -9. g. 55. m.

Hor. 7. m. 27. *Mercury* from the same Star 32. g. 18. m. 0. sec.−11. g. 51. m. .

All which Observations I set down, to the end you may compare them, hopeling you shall find they will rather confirm then derogate from the place and time of this great Conjunction of *Saturn* and *Iupiter*: yet, to speak ingenuously, not trusting my Observation more then I should, partly because the day-light would not suffer us to observe other fixled Stars with the Planets, and partly by reason of the slow motion of *Saturn* and *Iupiter*, I layd them aside till after perulsing *Kepler de Stella Nova*, I was the more encouraged to make account of my Observation: for I found in pag. 48. that he, by such Observation as he could make, constituteth the time at *Prage* to be the 7 day, 8 hor. and 20 min. although afterwards he shew as little confidence in the hour as my self did before, I was confirmed by his Observation. Wherelfore if the *Meridians* be compared, the

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difference of time between his Observaltion and mine is not above 13 m. which is not worth the speaking of, and may happen as well by the Error of *Longiltude*, as of the Observation. For the *Lon/gitude* of *Prage*, as *Ty*•*ho* noteth in his *Progymnasmat*•, pag. 131. is 38. gr. 0. m. And the *Longitude* of *London* in Mr *Cambdens Britannia* is 23. gr. 25. m. the difference is 14. gr. 35. m. which wants but 2. m. of the whole hour. Wherefore if 58. m. being the common difference between the *Meridians* of *Prage* and *London*, be subducted from 8 hor. 28 m. the remainder sheweth the moment of the great Conjunction at *London* to be 7 ho. 22 m. by *Kepler*. But whereas my Observation of *Iupiter* was at 7 ho. 40 m. with me, whose dwelling is remolved about 5 m. of time from the *Meri/dian* of *London*, which is but 13 m. later then *Kepler* assigneth it, whose Observation, being only by the *Quadrate* and *Azi/muth* with many operations and correctilons, as you may read, I hold not so cerltain as my own.

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Thus then having both observed the time my self, and confirmed my Observation by *Keplers*, and by Observations of my own, both preceding and subsequent, (for that the observation of *Iupiter* the 3 of *Decemb*. and those of the 16. being examined by the diurnal Motion, will vary little or nothing from the day and time before limited,) I will now erect the Figure of the Heavens for the *Horizon* of *London* at that instant, that so you may have a foundation of further Speculations then have hitherto been thought on.

[illustration]

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The first things therefore in this Filgure, whereupon I pray you curiously cast your eye, are the Ascendent, and the M: C: the degree ascending, being the very place of the new Star, which appeared the year following 1604. in *Serpen:* the M: C: the degree of the Sun at the time of the great Eclipse the year after, 1605. The Conjunction it self you see hapned *in duodecimo loco*.

So as the places of the new Star and the Eclipses are thus celebrated with spelcial Prerogative in respect of us. But for so much as by the doctrine of *Leovitius*, and other *Astrologers*, the \circ of *Mars*, with these two superiour Planets, is also requisite for the just complement of a great \circ , you shall also see how the end and accomplishment thereof doth an swer the beginning. I was not at leisure to observe the Planets my self the year following: but *Kepler* supplieth my want, who *pag*. 55. observed *Mars* to be joyned with *Saturn* the 16 of *Sept*. 1604. after out stile, about 8. in the Elvening at *Prage*, in the 10 gr. 1 m. of \bigotimes : and again, upon the 29 day of the same moneth an hour before

Noon, he affirm eth

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Mars to have passed by *Iupiter*, and •o fully to absolve this great meeting and \circ of the three superior Planets in the 19 gr. 12 m. of \bigotimes . The degree of the Elclipsed Sun, at what time the new Star was not seen, as he proveth by the Testilmony of many famous Astronomers, as of *Fabritius*, *R*•*slinus*, and others: But behold the 30 of *Sept*. (which was the very day following) in the Evening, this rare and wonderful *Phaenomena* appearled just almost in the place where the great \circ was accomplished, *viz*. in the 17 gr. 40 m. of \bigotimes , the degree ascending at *London* in the beginning of the great \circ , and now 1. ½ gr. before the ending therelof: at what time also, if you please to consider the place of the Sun by *Tyeho*'s account, you shall find him an hour after Sun-set the 30 of *Sept*. at *London*, being 36 m. past 6 of the Clock at Even (when the Star certainly

was first seen) to hold 17 gr. 30 m. of Ω , the place almost exactly of his Eclipse the year following, and in a perfect \star to the new Star now first appearing, and the Ascendant in the great Conjunction.

Certainly when I consider first how

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exactly all these dependances follow another, I cannot think that God hath observed this streight familiarity beltween the \circ , the new Star, and the Elclipse in vain, or that they should thu• concur with the *Asc:* and M: C: of *Lon/don* at

the time of the great \circ ; but tha• as the signification is general, so questionless, in the participation of the effects, *London*, and with it *England*, is like to taste more fully thereof then other places.

Now a little to consider these Appearlances by the precepts of *Astrologie*, we see all these Conjunctions celebrated in \bigotimes , which, as it is *Signum*

Bicorporeum, by *Ptolomy*, signifieth of Kings, and as it is the house of *Iupiter*, it may both be applyed to matter and persons of State and Religion. Wherefore, as we may rightly call the sign of \bigcirc at this time the Court or Temple of *Heaven*, where al• the Planets have made their Assembly So is it not unworthy the noting in what order they hold the same, which for certain was all one with that which the Planets themselves hold in Heaven; as *Salturn* is highest, so was his *Northern* Laltitude greatest, *viz.* 1 gr. 40. m. *Iupiter*

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next 36 m. *Sept.* also, and *Mars* lowest of all, having *Meridional* Latitude 1 gr. 36 m. at his Conjunction with *Saturn* and *Iupiter*. But the new Star shined albove them all, both in respect of the *Elcliptick*, and the *Diameter* of the World; which nevertheless is not out of order, if we respect the scituation of the *Orbs:* But herein to be admired, that as the same had no Motion, nor any prodigious Tayl, or Hair, (as Comets are wont,) but both in place, and form, and fixedness reprelsented a fixed Star; so it may be proportionably collected, That what was delcreed in this notable Synod of the PlaInets, was also ratified by the fixed Stars, and by all the Spheres of Heaven. Neilther is it to be neglected, that this new Star excelled all the rest of the Planets in Magnitude and Light: and whereas belfore perverse old *Saturn* (the President of Antiquity) both in respect of his scitulation in his own Orb, being in *Apogaeo Eccentrici et Epicycli*, and also in regard of his Latitude, was elevated above *Iupilter* in his own house: Now this new Star having Latitude, 1 gr. 53 m. 54 sec. *Sept.* by our Observation is elevated albove

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Saturn, and therefore when Satur• hardly enduring to be thus over-topped, prepared against him, and toward the endling of Novem. that year thought to have encountred him; behold he was also fain to come under the Lee (as the Sea-men term it) of the new Star, and so glad to pass away, and leave the new Star still keeping possession, and as it were master of the field, where it still continued, till at last the Sun returning the year followling to the place which he held in the conclusion of the great Conjunction, and the beginning of this new Star, as before is shewed, he there finished the Catastrophe of all this solemn Art, with a great Eclipse of his Light exactly in the Mid-heaven of the beginning of the great Conjunction of Iupiter and Saturn, and in a \star to the Ascendant thereof, and the place of this new Star. This is the true Historical Narration.

What the meaning hereof is, I leave to those that are indued with a more dilvine and Prophetical Instinct then my self: Yet thus much we see, that he

who overlooked proud *Iupiter*, and challenged Antiquity to himself, is here put down

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by the brightness of this new Light. And further, as the Sun *Metaphorically* relpresenteth Kings and Magistrates, and Nobility in *Astrologie* are resembled to the Planets about the Sun: So the fixed Stars are compared to the People, and Commons, amongst whom some excel others, and therefore whether there be a new *Democraty* or *Aristocraty* of the Church and Common-wealth founded while the Sun suffereth his light to be oblscured by the)), or whether the Gospel (often by the *Scriptures* resembled to the Sun) shall suffer an Eclipse, I take not upon me to decide. But this I verily believe, as far as I can look into it with any probable guess, that since the belginning of this great Conjunction there hath been many Treaties of Peace over all the parts of the World, both between *us* and the *French*, the *Lowcountry-men* and the *Spaniard*, and also between the *Emperor*, *Turks* and *Hungarians;* all which are concluded, saving the Peace between the *Low-countries* and *Spain:* So you shall see (if I be not deceived) that Treaty will break off, and by that means the Wars be renewed, & the King

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of *Spain* utterly beaten out of his *Indies*, and the *Gospel* propagated unto the *Southern* parts. For to what other end is this new Star Perpendicular to the *Indian* Seas, and to the best part of *America*? To what end also (though *Mars* seemeth in the Eclipse in respect of his Position, as also in the great Conljunction in respect of his Latitude dilrected) is he notwithstanding both in the figure of the great Conjunction elevated above all the Planets, while *Saturn* and *Iupiter* are *in pessimo loco*, and in the figure of the Eclipse, as your self materilally noted, *in imperante gradu & signo*, over the place Eclipsed? Besides, you aptly note the dissembling and treachelrous \star of *Saturn in* 12. *loco* to the place Eclipsed, together with the hostile and exact Irradiation of *Iupiter* to the same: I speak not these things as if I prolnounced them *Ab Apollinis Tripode*, but as I compare the likelihood of fulture accidents by the state of things present, as they have any allusion to the apparition of the heavenly bodies: All which I submit to your grave Cenlsure.

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And so craving pardon for my tedilousness, and not doubting your good acleptance of my good will, I commend my love unfeignedly, and rest,

Yours most assured, Christopher Heydon.

April 2. 1608.

FINIS.

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